THE BUILDER

a Journal for the ARCHITECT & CONSTRUCTOR

VOL. CLVI MARCH 10 1939 No. 5014

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(Illustrated)

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EVERY FRIDAY 9D.

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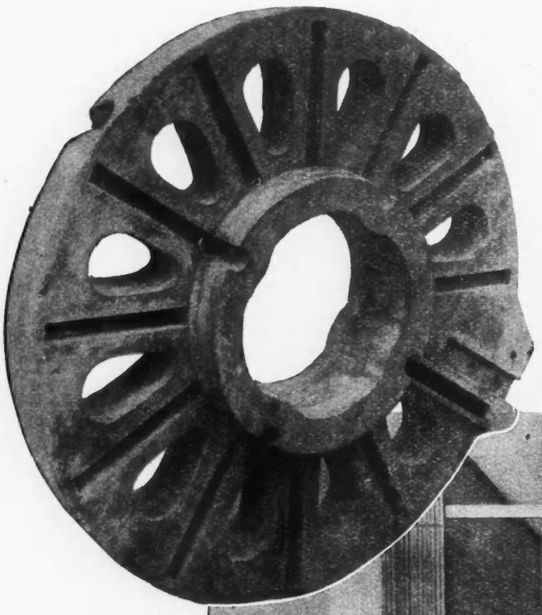

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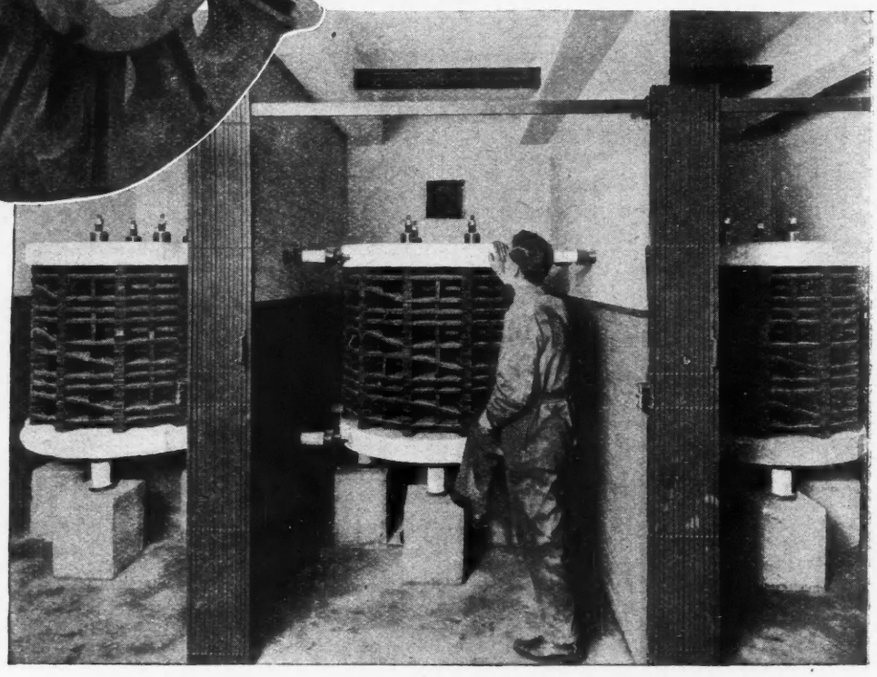

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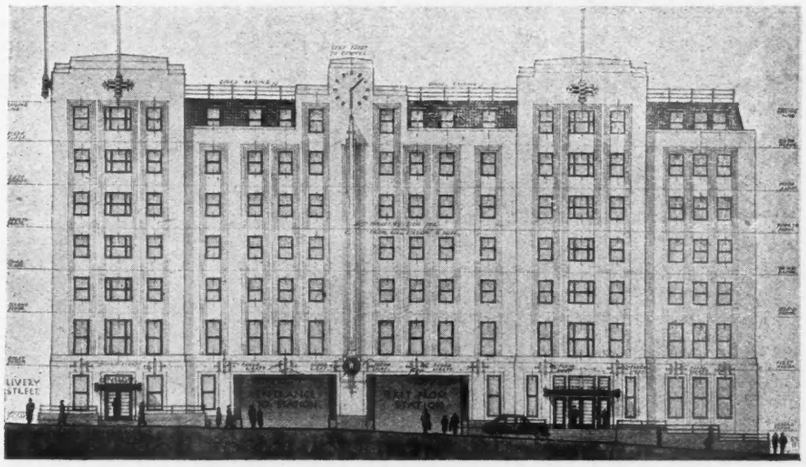
THE BUILDER

INCORPORATING

'ARCHITECTURE' AND 'THE BRITISH ARCHITECT'

Vol. CLVI MARCH 10 1939 No. 5014



PROPOSED G.W.R. HOTEL, COLMORE ROW, BIRMINGHAM.

MR. P. E. CULVERHOUSE, F.R.I.B.A., ARCHITECT TO THE RAILWAY.

(See page 463.)

COMING EVENTS

Friday, March 10.

Town Planning Institute. Professor W. G. Holford on "The Location and Design of Trading Estates." Caxton Hall, S.W.1. 6 p.m.

Saturday, March 11.

Building Surveyors' Association. Quarterly General Meeting. Civic Centre Buildings, Birmingham. 2 p.m.

Monday March 13.

Institution of Structural Engineers (Midland Counties Branch: Junior Members' Section). Mr. C. M. Gilbin on "Some Recent Developments in Reinforced Concrete." James Watt Memorial Institute, Birmingham. 6.30 p.m.

Mondays, March 13, 20 and 27.

Royal Society of Arts. Mr. Harold J. L. Wright on "Some Masters of Engraving." 8 p.m.

Tuesday, March 14.

Architectural Association. Professor A. E. Richardson on "Recent Achievements in European Architecture." 8.30 p.m.

Air Raid Protection Institute. Mr. Oliver Simmonds, Presidential Address: "Civil Defence: A Protective Habit of Mind." 18, John-street, W.C.2. 8 p.m.

Institution of Civil Engineers (South Wales and Monmouthshire Association). Joint Meeting with the Institution of Mechanical Engineers. Mr. J. S. Caswell on "Research of Materials and Engineering Design." Royal Metal Exchange, Swansea. 6.30 p.m.

Wednesday, March 15.

Ecclesiological Society. Mr. J. J. Edmunds on "Some Churches in Bedfordshire." 6, Queen-square, W.C.1. 8 p.m.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "Early Christian Architecture (A.D. 300–600 and later): Basilican Churches outside Rome, Baptisteries. Tombs." 6 p.m.

Institution of Structural Engineers (Scottish Branch). Dr. R. Hunter on "Corrosion of Steel." 129 Bath-street, Glasgow. 7.15 p.m.

Institution of Structural Engineers (Yorkshire Branch). Mr. C. Helsby on "Air Raid Structures and A.R.P. in Spain." Leeds. 7 p.m.

Institution of Civil Engineers (Manchester and District Association). Mr. C. R. Opie on "The Industrial Field of the Civil Engineer." 36, George-street, Manchester, 6.45 p.m.

Thursday, March 16.

Birmingham and Five Counties Architectural Association Annual Dinner. Grand Hotel, Birmingham.

Society of Antiquaries. Mr. John Charlton, Dr. T. Borenius and Madame Borenius, on "Excavations at Clarendon Palace, 1938." 8.30 p.m.

Leeds in London Architectural Society. Informal Supper. 20, Devereux-court, W.C.2. 7.30 p.m.

Friday, March 17.

College of Estate Management. Annual dinner of the Students' Union. Imperial Hotel, Russell-square, W.C.1.

Architectural Association. Mr. Henry H. Hill on "Regional Building in the British Isles: Ireland." 8.30 p.m.

Institution of Structural Engineers (Midland Counties Branch). Mr. H. W. Coultas on "Military Engineering." James Watt Memorial Institute, Birmingham. 6.30 p.m.

British Electrical Development Association. Annual Luncheon. Guest of Honour, H.R.H. Duke of Kent. Grosvenor House, W.1. 1 p.m.

Monday, March 20.

Institution of Structural Engineers (London Junior Members' Branch). Mr. P. H. D. Silva on "Development of the Arch." 6.30 p.m.

Tuesday, March 21.

Institution of Heating and Ventilating Engineers (London and District Branch). Mr. A. J. Bullivant on "General Fan Engineering as Applied to Industrial Work." 39, Victoria-street, S.W.1. 6.45 p.m.

Institution of Civil Engineers. Mr. J. H. Harley-Mason on "Reconstruction of Aldgate East Station." 6 p.m.

Wednesday, March 22.

Timber Trade Federation. Annual Dinner. Grosvenor House, W.1. 7.30 p.m.

L.C.C. Central School of Arts and Crafts. Sir Banister Fletcher on "Byzantine Architecture (A.D. 324 onwards): Influences. Architectural Character, S. Vitale, Ravenna. S. Sophia, Constantinople." 6 p.m.

Thursday, March 23.

Institution of Structural Engineers. Mr. Ewart S. Andrews on "Inexpensive Research Work." 6.30 p.m.

Institution of Civil Engineers. Annual Dinner of the Corporate Members and Associates. Grosvenor House, W.1. 7.45 p.m.

Institution of Civil Engineers (Birmingham and District Association). Mr. J. Singleton-Green on "Concrete Aggregates." James Watt Memorial Institute, Birmingham. 6 p.m.

Institution of Civil Engineers (Bristol and District Association). Mr. C. R. Harman on "How Welding Can Help the Civil Engineer." Royal Hotel, College Green, Bristol. 5 p.m.

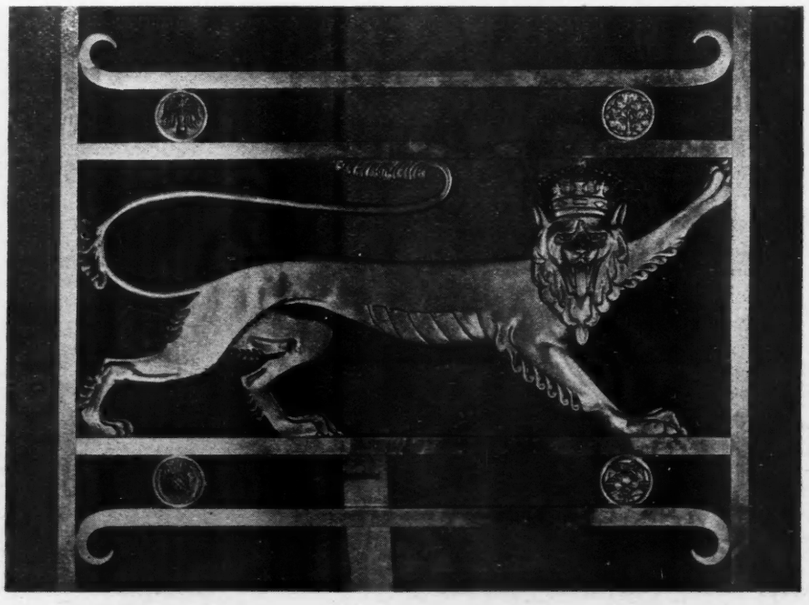
Society of Antiquaries. Dr. W. L. Hildburgh on "English Alabaster Carvings as Records of the Mediæval Religious Drama." 8.30 p.m.

ENTRANCE DOORS FOR THE U.K. PAVILION, NEW YORK WORLD'S FAIR.

Left: THE DOORS AND FIXED HEAD.

DESIGNED BY MESSRS. STANLEY HALL & EASTON AND ROBERTSON, FF.R.I.B.A.

Right: DETAIL OF LION AND SUPPORTING BARS.



The United Kingdom Exhibit at the New York World's Fair occupies two pavilions connected by a bridge, the South Pavilion being the grand vestibule to the larger North Pavilion. Access to the South Pavilion is by a double outside staircase in an open loggia, from which two sets of nickel-silver doors lead to vestibules. One of these sets is shown on this page. The overall height of the doorway is 14 ft., and the width 12 ft. The door handles are surmounted by a gold crown. Some technical details will be found on page 497.

TOPICS OF THE DAY

ARCHITECTURE IN THE PROVINCES.

WITHIN the memory of many of us, a journey to the provinces was, in an architectural sense, to enter into the land of the Philistines, where the practice of architecture was regarded mainly as the production of a superlative standard of building construction by men who gloried in their practical knowledge and scorned the artistic theories with which the London masters tried to interpret their equally practical jobs. Just here and there would be some lone outpost of art, where a man of outstanding talent would uphold the higher aims of architecture, without much sympathy or support from his neighbours. The names of such men could almost be counted on the fingers, and their influence is still apparent in their own districts, and even elsewhere.

Towards the end of last century the architectural schools began to develop in London and in one or two provincial centres. The effect was to create more of an artistic community among the young men, the influence of which reacted not only upon London, but in some degree upon the provincial homes from which the students came and to which they returned. The feeling grew apace that it was at educational centres such as these, rather than in the deadly atmosphere of the country office of those days, that the best training for the coming architect was to be obtained, and there developed a general tendency to send boys to serve their articles in London, where good evening school training could also be obtained.

By the law of average many of these young men proved their talent and carried off some of the prizes and honours, to return to the provincial districts in a triumph which, if it did not carry all before it, at least lent support to the discovery that there was more in architecture than could be found in Rivington.

In the last thirty years or so we have thus seen a levelling up of values in architectural practice throughout the country to an extent which, it is no exaggeration to say, has made the remotest districts accessible to skilled architectural advice with local knowledge.

At the same time, it should not be assumed that the essential characteristics of the London and the provincial architect have become merged into one uninteresting average, for there are still wide differences in methods and conditions which make these branches of practice fairly distinct. The country architect still finds it easier to live on his job and does much by word of mouth and personal direction which his London colleague must perforce make precisely clear upon his drawings; and perhaps the first essential difference which the assistant finds when moving from town to country is this apparent lack of the precision which he was trained to regard as essential in his London office. But this superficial difference in method covers the same aim, which is to build soundly and with real architectural feeling—an aim which gives a common interest to architects of all districts and types of practice, and makes the Londoner feel at home in intercourse with his colleagues from the Provinces.

There is every reason why everything possible should be done to lessen the visible differences between the metropolitan and the non-metropolitan architect; in fact, we dislike that particular terminology, which by implication marks the geographical area with frontiers which need not, and ought not to, exist. There is a movement at work to amend the constitution of the Institute in such a way that the Area Society boundaries meet in London instead of at an arbitrary radius from its centre, so that all London members become members also of an Area Society. Such a change of constitution would do much to rub out the little jealousies and differences of outlook which do exist despite the general improvement in interrelations.

The problem remains as to where lies the legitimate field of practice for the London architect. There are some in the provinces who regard their localities almost in the light of personal preserves, and who resent the appearance of London architects therein. To them, the place for Londoners to build is in London; for the country architect, in his own neighbourhood. This parochial point of view is neither correct nor general. The only factor which should determine the scope and limits of any architectural practice is its capacity for administering work in accordance with a high standard. The provincial architect will remain supreme in his own district for just so long as he can produce the best possible results, and he will always be liable to displacement by a better man.

On the other hand, the Londoner can no longer regard himself as a missionary in savage country, and must be as scrupulous in his dealings with a country colleague as he would be with a fellow Londoner. It has not been unknown for the Londoner to adopt an attitude of superiority towards the work of the provincial architect. This is something which is disappearing with personal contact and as a direct result of provincial representation on the Council of the Institute.

The average London architect, experiencing daily the strain and hurry of journeying to and from business and the somewhat drab outlook of the London office, probably feels some sense of envy of his colleague in the country, working near home, among friends, and within touch of his jobs, with all the joys of watching and controlling their development from paper to fact. He may well wonder whether the bigger prizes which are open to him in the Metropolis might not be fairly exchanged for the quieter pleasures of a life in the country.

It is perhaps fortunate that human beings are not cut out to one pattern, because there is a place for both types of practice in the social scheme and for types of men to fit either set of circumstances. Together, these types make up a profession practising a great art which has the strongest influence upon the civilising process through which we are still passing.

MR. BENSLYN'S PAPER.

WITH these thoughts in mind, we listened with particular interest to the paper on "Architecture in the Provinces," read at the R.I.B.A. on Monday by Mr. W. T. Benslyn. Excellent in its criticism and catholic in its taste as it was, we must confess to a feeling of slight disappointment that the paper was not specifically addressed to the intelligent and talented work being done by many of the architects practising outside the Metropolis. Had this distinction been observed, no doubt Mr. Benslyn (who has had a wide experience of both Metropolitan and provincial practice) would have been enabled to make some interesting comparisons between the talents and opportunities, virtues and vices, of the two groups.

At the same time, his decision not to follow this potentially provocative course is in keeping with the current state of architectural affairs, in which London architects are doing their best to extend their practices in the country and the aim of many provincial architects would seem to be to establish a London office. In short, the sharp distinction between the Metropolis and the shires is tending to become lost. Whether this movement is in the direction of establishing a national style we cannot say; we hope not, for it would be a pity if the individuality of certain cities and towns were flattened out. Certainly, to judge by the review of architecture as shown by Mr. Benslyn, there is little danger of this happening.

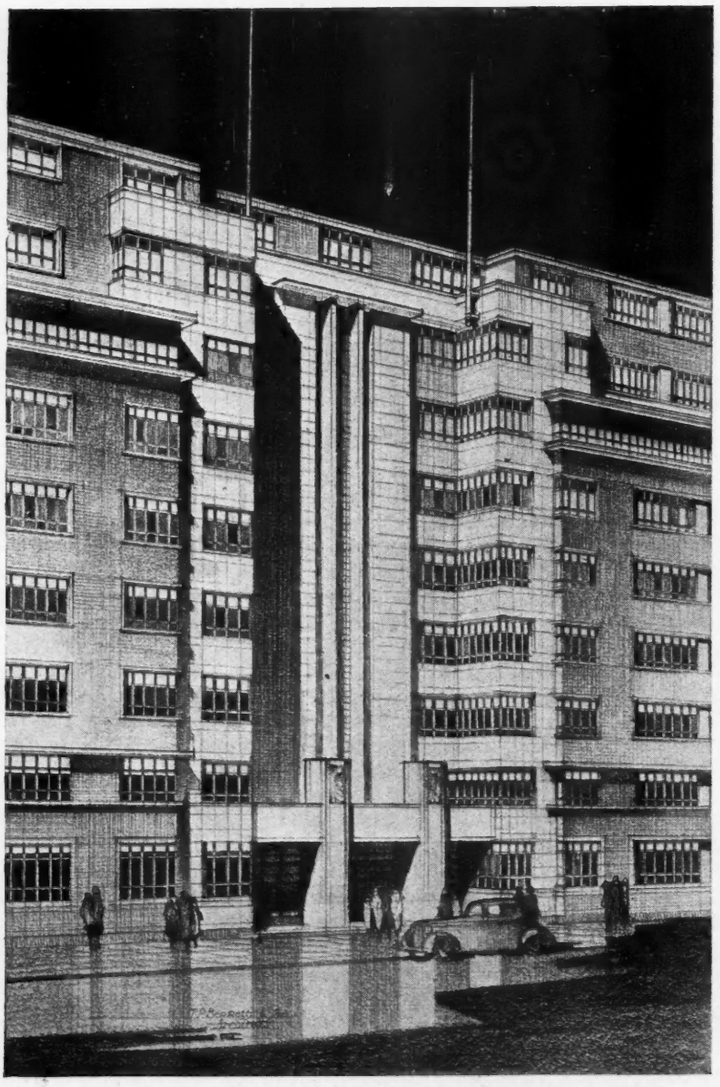
NOTES AND NEWS

The New Institut Francais.

On the day of his arrival in London (March 21) the President of the French Republic will open the new buildings of the Institut Français in Queensberry-place. These buildings were erected partly to the plans of a British architect, Mr. A. J. Thomas, F.R.I.B.A., and partly to those of Monsieur Patrice Bonnet, Architect-in-Chief to the French Government. Mr. Thomas is well known in this country for his work in connection with building schemes of municipal authorities. Monsieur Patrice Bonnet's official function is that of Curator of the Palace of Versailles; it was in this capacity that he was responsible for the arrangements made there to entertain Their Majesties the King and Queen during their recent State visit to France. The portion of the Institut Français designed by Mr. Thomas is the larger area, mainly situated along Queensberry-way, and is intended to house all the scholastic activities; the part which represents Monsieur Bonnet's contribution provides facilities of a more general kind, such as lectures for the general public, theatrical performances and social activities. The differing character of the two purposes is clearly reflected in the appearance of the respective sections. Mr. Thomas's plans are business-like and straightforward and form an imposing squarish block; Monsieur Bonnet's conception tends to the ornamental and the symbolic, with an unusual façade and an impressive spaciousness, even grandeur, in the interior, which includes large exhibition galleries, club rooms, reception hall, theatre hall and a library with ample room for the 20,000 French books to be housed in it.

Mr. Frank Lloyd Wright: Lectures at the R.I.B.A.

Sulgrave Manor Board's Watson Lectures for 1939, which Mr. Frank Lloyd Wright was to have given at the Royal Institute last November, will be given on Tuesday, May 2; Thursday, May 4; Tuesday, May 9; Thursday, May 11. The first lecture on May 2 will be at 5.30 p.m. The last three lectures will be at 8.30 p.m. Mr. Frank Lloyd Wright's subject will be "Organic Architecture. The Idea, the Movement, the Scene at Present and the Future." Free tickets for reserved seats can be obtained on application to the Secretary, the Sulgrave Manor Board, 37, Charles-street, W.1. A number of seats will be left unreserved.



DESIGN FOR "ABELL HOUSE," WESTMINSTER, S.W.
MESSRS. T. P. BENNETT AND SON, F.R.I.B.A., ARCHITECTS

The Chartered Surveyors' Institution and Parliament-square.

Speaking at the annual dinner of the Chartered Surveyors' Institution at Grosvenor House, London, on March 7, the president, Sir Charles Bressey, C.B., author of the "Highway Development Survey of Greater London," made an important reference to the proposed improvement of Parliament-square. The council of the Institution, he said, were, like himself, wholeheartedly in sympathy with the public-spirited efforts which were being made by the Middlesex County Council and others to preserve the Westminster House site as a permanent open space, with the object of enhancing the dignity and beauty of a site which inspired the deepest affection and pride in the heart of every member of the English-speaking race. The council of the Institution had accordingly decided to offer a substantial sum, which might even reach five figures, as a contribution towards the fund required for effecting this indispensable improvement. (A report of the dinner is given on page 490.)

Deep Shelters in Hampstead: An Engineering Appointment.

Hampstead Borough Council has decided, by a majority of one, to engage Dr. Oscar Faber to make a report on the provision of deep underground shelters for Hampstead. If the Council proceed with the work in accordance with his plans, he is to act as engineer. In that event Dr. Faber would be paid 5 per cent. of the first £100,000 expended; 4 per cent. of the next £100,000; and 3 per cent. in respect of expenditure in excess of £200,000.

A "Greek" Thomson Church for Sale.

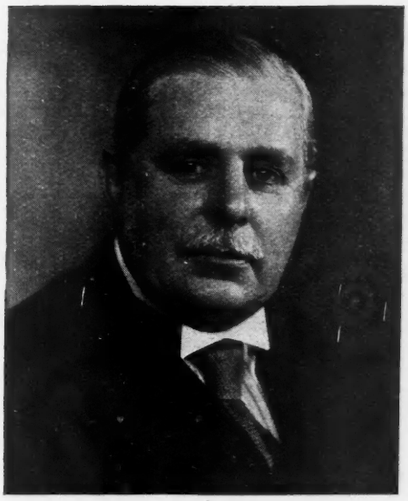
We regret to learn that St. Vincent-street U.F. Church, Glasgow, a fine example of the work of Alexander "Greek" Thomson, is to be sold, the dwindling congregation, faced with the heavy financial burden of maintaining the building, having decided to dissolve. The church is perhaps the finest of the three Glasgow churches designed by "Greek" Thomson, who was born in Balfron (Stirlingshire) in 1817.

"Getting A House": A Broadcast Series.

The B.B.C. announces that a series of three broadcasts on "Getting A House" will be provided for Northern listeners. The first one will be given this Friday, March 10. Listeners will hear a husband and wife consulting with one of their friends, who is an estate agent, about choosing houses, about such problems as whether to buy or rent. Later the pair settle down and have to face problems of the later stages in home-making. Mr. F. Leslie Halliday, A.R.I.B.A., A.M.T.P.I., of Manchester, has arranged the series. The second talk will be on March 21, and the third on March 27. All three talks are in the Northern programme.

The Artists' General Benevolent Institution.

The Annual General Meeting of the Artists' General Benevolent Institution was held at the Royal Academy on Wednesday, March 1. We note that the sixty-seventh annual report states that during 1938 the sum expended on relief was £10,932, but the income from invested funds is wholly inadequate to meet the demands of the Institution, and it has to rely for the balance of its income on the



MR. A. J. THOMAS, F.R.I.B.A., Architect (with M. Bonnet) for the new buildings for the Institut Francais, to be opened on March 21 by M. Lebrun, President of the French Republic. (See facing page.)

amount collected by the stewards. Mention is also made of the fact that the uncertainty of the outlook since the crisis of last September has in many cases been disastrous to those artists who were already in difficulties, and has forced many others to apply to the Institution who in happier times would have been able to do without its aid. The offices of the Institution are at 5, Vigo-street, W.1.

The R.A. School: Competition Successes of ex-Students.

It is interesting to note that the firms of architects placed first and second in the recent competition for the rebuilding of St. George's Hospital included four ex-students of the Royal Academy School of Architecture: Messrs. A. S. Gray and F. L. Hannam, partners in the firm of Watkins and Partners, who are the authors of the winning design, and Messrs. David Carr and W. F. Howard, authors of the design placed second in order of merit. All these four architects were contemporaries at the School a few years ago, and two of them gained the highest distinction the School has to offer—the Royal Academy Gold Medal and Travelling Studentship for architectural design, Mr. Howard in 1931 and Mr. Gray in 1933.

Institute of Registered Architects: Postponement of Dinner.

We are informed that the annual dinner of the Institute of Registered Architects arranged for to-night, March 10, has been postponed owing to unforeseen circumstances.

Bristol City Council: Deputy Architect Decision.

Bristol City Council have agreed to the appointment of a deputy city architect at a salary of £600, rising by increments of £50 to £700 a year. When this decision was reached it was stated that the value of works in progress and those for which plans were being prepared by the city architect's department amounted approximately to £1,520,000, which would entail an expenditure of approximately £81,000 on fees. An efficiently staffed architect's department would save at least three-quarters of the £81,000 fees.

Birmingham's New Hotel: G.W.R. Scheme.

The hotel which the Great Western Railway propose to build at Birmingham (Snow-hill Station) will be a six-floor steel-framed structure fronting on to Colmore-row and extending back some 100 feet down Snow-hill and Livery-street. It will have fireproof floors and will be faced with natural Portland stone. On the ground floor will be situated the reception offices, lounge hall, cocktail bar and cloak-rooms, also a grill-room and restaurant and bar in the position of those existing to-day. On the first floor will be the main public rooms, consisting of a public dining-room, seating over 150, spacious lounge, smoke-room and three rooms which can be converted into one large private dining-room to accommodate 160.

There will also be special rooms where commercial concerns can arrange private trade shows and entertain their customers. The kitchens will be situated on this floor. All the bedrooms will be situated on the remaining five floors, each bedroom having its own private bathroom and lavatory. The hotel will be centrally heated throughout and it is proposed to air-condition the main public rooms.

A new six-storey block of buildings, in brick, will be constructed for the divisional offices. These will extend over the existing cab drive from the hotel down Livery-street. A similar four-storey block of buildings will accommodate the hotel and refreshment-room staff. Work is expected to commence this year. Mr. P. Emerson Culverhouse, F.R.I.B.A., Architect to the Great Western Railway Co., is the architect for the new hotel.

A perspective view of the proposed hotel is on page 459.

Professional Announcement.

Messrs. Widnell and Trollope announce that they have taken into partnership Mr. F. W. Smitherman, P.A.S.I., who has been with the firm for 20 years. The style of the firm remains unchanged.

COMPETITION NEWS

New Municipal Offices, Bedworth.

Mr. S. N. Cooke, F.R.I.B.A., the assessor in this competition, has made the following awards: 1st (£50), Mr. Harry W. Weedon, A.R.I.B.A., Birmingham; 2nd (£25), Mr. Harold S. Scott, A.R.I.B.A., Birmingham; 3rd (£15), Messrs. Hickton, Madeley and Salt, F. and AA.R.I.B.A., Birmingham.

Designs highly commended: 5, Mr. T. M. Ashford, A.R.I.B.A., Birmingham; 8, Mr. Frank O. Osborne, A.R.I.B.A., Birmingham; 10, Messrs. Philip B. Herbert, A.R.I.B.A., and P. Skelcher, Birmingham; 12, Mr. Harry W. Weedon, A.R.I.B.A. (second design), Birmingham.

The winning design is illustrated on pages 487-8. The competition was limited to registered architects practising in Warwickshire.

New Cathedral, Auckland, New Zealand.

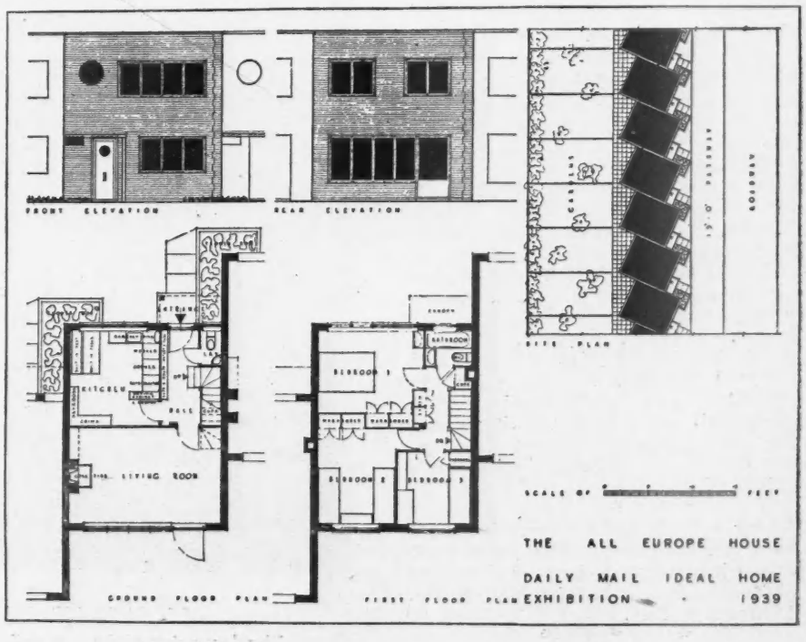
The General Trust Board of the Diocese of Auckland invite members of the New Zealand Institute of Architects resident in New Zealand or overseas to submit in competition designs for a new cathedral. The assessor is Sir Giles Gilbert Scott, R.A., F.R.I.B.A. Premiums of £1,000, £400, £200 and £100 are offered. The last day for submitting designs is November 15, and the last day for questions May 31. Conditions of the competition may be obtained on application to (*a*) the General Trust Board, P.O. Box 652, Auckland, New Zealand, or (*b*) the Secretary, R.I.B.A., 66, Portland-place, London, W.1. Deposit £1 1s.

Camp Competition.

Particulars of the competition for designs for a camp, which is being organised by the Building Centre, are now ready. Prizes offered are of £200 and £100. Rules of the competition and site plan can be obtained from Mr. F. R. Yerbury, The Building Centre, 158, New Bond-street, W.1, price 2s. 6d. post free.

Proposed New Council Offices, Consett, Co. Durham.

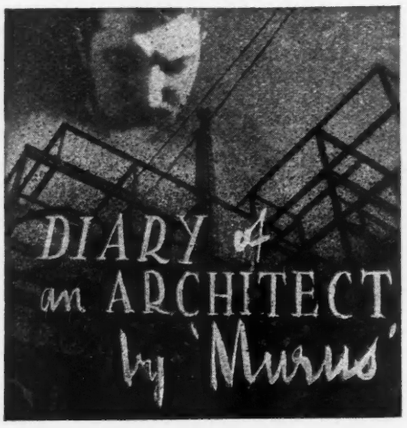
We are informed that the Council have received to date 165 applications for the conditions relating to this competition.



DESIGN FOR AN "ALL-EUROPE" HOUSE FOR THE "IDEAL HOME" EXHIBITION.

BY MISS ELIZABETH DENBY.

"RECENT ARCHITECTURE IN THE PROVINCES"



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The work necessary for each of these sections should be proceeding independently of the other and with complete and separate organisation. In that way only would the necessary expedition be possible.

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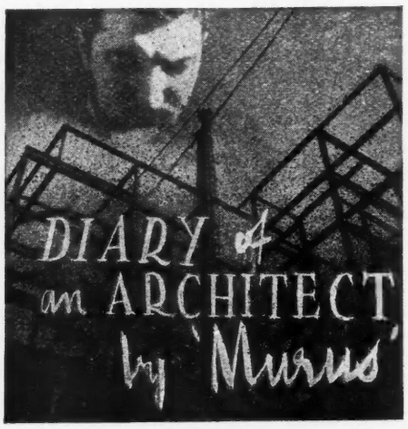

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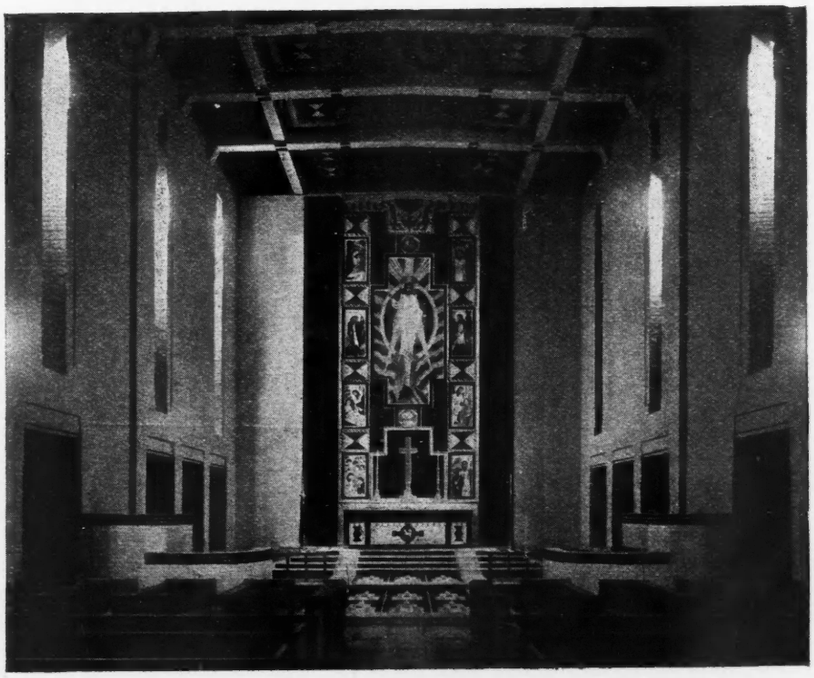

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But what is the position of the designer of a so-called "bomb-proof" shelter? He is in the same position as an architect or

engineer whose client asks him to design a floor to carry an unknown load or to resist an unknown impact and to guarantee that it will resist those unknown stresses—a commission with which no architect or engineer in his right senses would have anything to do.

It is very probable that various Governments have data on the effect of their own bombs, but this information will obviously never be divulged for the benefit of possible enemies. Otherwise it would be a simple matter for any country to provide protection which would to a large extent nullify the effect of an enemy bombardment.

All the schemes I have seen are based upon *assumed* effects of bomb impact and concussion, and these assumptions may be very far from the truth. Yet designs based on these assumptions are labelled "bomb-proof." Some years ago it was common to claim that certain new buildings were "fire-proof," and the term "first-resisting" became general only after some of these alleged "fire-proof" buildings were badly damaged by fire. It would be a much worse disaster if a shelter known as "bomb-proof" were found to be wrongly labelled only when a bomb found its way among thousands of people who had been led to believe they were absolutely safe in a "bomb-proof" shelter.

It has also been stated by eminent people that it can be proved mathematically that during indiscriminate bombing there will be fewer casualties if people are congregated in a few shelters than if they are uniformly dispersed throughout a given area. What kind of mathematics are used to prove this? B. B.

London.

OBITUARY

Cecil J. Morreau, M.A., A.R.I.B.A.

The architectural profession suffers loss by the death, at the age of 33, of Mr. Cecil J. Morreau. In spite of his comparative youth, Mr. Morreau had made a reputation as a research worker in building science, and his lecture on "The Prevention of Noise in Buildings"—read before the R.I.B.A. in November, 1937—stamped him as a man from whom the architectural profession and building industry had much to gain.

Cecil John Morreau was born in 1905 and was educated at Marlborough College and St. John's College, Cambridge, of which he was a scholar. In 1925 he obtained a first in the mathematical tripos, part 1, following this, in 1927, with a first in the engineering tripos, and a first in 1928 in the third examination in architecture. From 1928-1933 he was assistant in the offices of Messrs. Thomas Worthington and Sons, of Manchester, whom he left to engage in research work at the Building Research Station at Watford. In 1937 he joined Mr. Leslie Hiscock, F.R.I.B.A., of Guildford, in private practice, a partnership which existed at his death. Mr. Morreau was secretary of the Science Standing Committee of the R.I.B.A.

W. B. Savidge, A.R.I.B.A. (Retired).

It is with regret that we record the death of Mr. William Brandreth Savidge, Retired A.R.I.B.A., of Linden House, Clifton-lane, Ruddington.

Mr. Savidge retired from practice two years ago after over 40 years' association with the Notts, Derbyshire and Lincoln Architectural Society, of which body he was secretary from 1905 to 1910. He was elected an Associate of the Royal Institute in 1890

ARCHITECTURE IN THE PROVINCES

Mr. William T. Benslyn, A.R.C.A., F.R.I.B.A., was the author of a paper on "Recent Architecture in the Provinces," at a general meeting of the Royal Institute of British Architects, at 66, Portland-place, on Monday. The President, Mr. H. S. Goodhart-Rendel, occupied the chair.

In the course of his remarks, Mr. Benslyn said: To review recent architecture in the provinces in the space of one short paper is a most difficult task. I have defined the word recent as being applicable to the period since the war. Architecture in the mass is not only dependent on the architect, but on the general level of public intelligence and taste. There is an increasing realisation that buildings must fulfil their social and hygienic requirements with the minimum of concessions to convention. Modern constructional methods give opportunity for flexibility of planning impossible in the past.

The influence of tradition is being modified not only by the logic of the direct expression of the needs of buildings unknown in previous periods, but also by the fashions prevalent at the moment. Architects who have had the advantage of being trained in the schools since the war are more and more showing by their work the value of the training received. The habit of foreign travel acquired by many during the war has persisted. Visits to European countries are so easy and so attractive that first one country and then another has influenced our taste. More recently outside stylistic influence is less noticeable and the possibilities inherent in the problem itself are more often allowed to dominate the form of its solution.

Although a great number of our buildings still conform to the classical tradition, there is undoubtedly an increasingly realistic outlook on architectural matters among all classes of the community, and this is mirrored in many of the buildings recently, outside stylistic influence is less examples I have selected are, I trust, representative of what is actually happening, my approach to this subject being to review, not to preach.

I am sorry that I cannot show you many examples of monumental architecture in the provinces, but there is at Leicester, however, a war memorial by Sir Edwin Lutyens which can justly be described as monumental.

My next examples are of civic buildings. Whatever criticisms may be levelled against the competition system, we must at least admit that competitions have been the means of discovering architectural ability which otherwise might not have been given an opportunity for expression.

Mr. Vincent Harris's New Reference Library and Town Hall at Manchester, won in competition, serve to emphasise the difficulty of dealing with extensions in the centre of a developed city and furthermore, that unless the problem is primarily viewed from the standpoint of town planning, an entirely satisfactory result is impossible. The problem here was solved by dividing the problem into two parts and treating the library as a circular building in the classical manner, and carrying out the extension of the Town Hall to harmonise as far as possible with the earlier Victorian Gothic work.

The competition for the new civic halls at Wolverhampton was won by Messrs. Lyons and Israel. The original competition design showed a more conventional use of the orders than the executed building. Its greatest merit is that the scientific knowledge available for solving the acoustic problems of a large hall has been so frankly utilised.

The recently completed City Hall at Norwich, also won in competition by Messrs. C. H. James and S. Rowland Pierce, is one of our finest examples of civic architecture. The building has to be seen to be fully appreciated, as the impression created is much finer that that to be obtained from the photographs. The colour of the Ketton stone harmonises admirably with the brickwork.

The Royal Hospital School, Holbrook, Suffolk, is another notable modern building obtained by competition. The architectural expression is traditional and possesses a sufficient element of the monumental to render it appropriate to its national importance. The architects were Messrs. Buckland and Haywood.

The Art Gallery at Leamington Spa is a very charming small building designed by Mr. A. C. Bunch, in the traditional manner, very restrained in its simple classical dignity.

H.M. Office of Works.

The speaker, continuing, said: I believe I am right in saying that the oldest organisation doing architectural work in this country is H.M. Office of Works. The high quality of the work being done by this office is, I think, generally admitted. Examples of the work of the department can be found in every part of the country, and are usually expressive of the cultural tradition of the district in which they are erected. Naturally, the work of such a department, serving as it does so many administrative sections of the Government, has built up a vast fund of experience and knowledge of their requirements. The buildings fulfil their purpose efficiently. They are well constructed, often with very considerable taste, and they have a definite air of Governmental stability. It would be wrong to expect them to be ostentatious, experimental or dramatic. A large number of them carry on the eighteenth-century English tradition. Although in these buildings use is not sacrificed to the expression of the personality of the designer, they do express personality, but not in an abnormal manner.

The R.A.F. College at Cranwell, a large undertaking perpetuating the tradition set by such buildings as Greenwich Hospital, is the personal work of Sir James West, and, the Post Office at Bath by Mr. A. Bulloch harmonises admirably with its surroundings.

The Central Telephone Exchange at Newcastle-upon-Tyne by Mr. H. T. Rees shows the treatment of the façade of one of these buildings in a large city. The smaller works, such as the post offices recently erected in the smaller country towns, always harmonise with the locality in which they are erected. The example I have chosen to emphasise how well this is done is the Post Office at Glossop, which has been erected in local stone. It is the work of Mr. A. R. Myers.

Cambridge.

A number of important new buildings have been erected at Cambridge since the War, the most important of which is the new University Library, which has been designed to group with the new Clare buildings. Both the University Library and the Clare buildings are the work of the same architect, Sir Giles Scott. Messrs. Stanley Hall, Easton and Robertson's work at Cambridge is very successful, and includes new buildings for Caius College, the Zoology buildings, and the School of Anatomy.

Dudley.

I know of no other town in the Black Country which possesses the individuality of Dudley. The new Town Hall, by Messrs. Harvey and Wicks, and the Dudley Zoo buildings, by Messrs. Tecton, both show considerable individuality. The new Town Hall was won in competition, and I know of no other building of its class in this country which has given more successful expression to the possibilities of craftsmanship applied to building. The Dudley Castle Zoo, by Messrs. Tecton, has aroused great interest, especially among the younger members of the profession. Altogether, it forms a stimulating, and to me exciting, group of buildings.

Barber Institute of Fine Arts.

The bequest of Lady Barber to the University of Birmingham, which enabled this Institute to be erected and its professor to be maintained, provides in addition an annual income for the purchase of objects of artistic merit, and it is not surprising that its director, Dr. Thomas Bodkin, late of Dublin, and its architect, Mr. Robert Atkinson, should have collaborated to produce a building so appropriate to its use, so modern, and yet at the same time so expressive in its plastic form of a culture enriched and refined by the study of the antique.

Hospitals.

The Birmingham Hospital Centre was won in competition by Messrs. Lanchester and Lodge, and in arranging the general layout of the buildings the architects have worked on a main axis line running almost due north and south, the buildings forming three main groups on this axis. There are few embellishments, but over the main entrance to the medical school there is a finely carved figure of Æsculapius. In contrast to this great undertaking I would like to mention the extensions of the Wolverhampton and Midland Counties Eye Infirmary recently carried out by Messrs. Lavender and Twentyman. This building presents the type of problem many provincial architects are called upon to solve. In all, it is a very pleasing modern building, and yet an eminently practical solution of the problem.

Housing.

The great responsibilities imposed on local authorities by housing and slum clearance legislation have been met largely by the development of new housing estates on the outskirts of large cities, and only in a minor degree by the erection of flats in central areas. Whether we agree that flats are the most desirable solution or not, we must, I feel, be prepared to grant that their erection does provide a solution free from some of the faults inherent in the twelve houses to the acre method of dealing with the problem. That they possess corresponding disadvantages must be admitted. Leeds and many other cities are now employing both solutions. The Quarry Hill flats scheme carried out by Mr. R. A. H. Livett is most boldly conceived not only in its planning but in the structural methods employed for its execution. It is one of the most outstanding contributions to our recent architecture, possessing considerable beauty, especially in the play of light on the curved surfaces. The impression given of clean, straightforward efficiency and suitability to purpose is quite remarkable.

Churches.

The majority of the churches recently erected in the provinces serve the needs of new housing estates; they are usually of brick, and the necessity for economy has had great bearing on their design. The most successful have sacrificed elaboration of detail in preference to cramping their size. Stylistic influence is less obvious than it was formerly. The Church of St. Gabriel, at Blackburn, by Mr. Velarde, is one of the most impressive I have seen, both externally and internally. Another very fine modern church is that at Oldbury, by Mr. Geo. Drysdale, which is dedicated to "Our Lady and St. Hubert." Internally, attention is focused on the altar, and the whole is admirably related to the more simply treated open timber-roofed nave. The sculptured emblems are the work of Mr. Alan Bridgwater. The church recently built at Walsall by Messrs. Lavender and Twentyman is notable for the way in which it makes use of the proportions of traditional work, whilst avoiding traditional detail. Its success is, I feel, primarily due to its good scale and proportion.

The Cemetery Chapel at Solihull, by Messrs. Harvey and Wicks, is a very simple building, so well proportioned and in such good taste that it is entitled to a very high place among modern church buildings.

Schools.

Recent school buildings express in their design the more comprehensive view now taken of the functions of education. The necessity for physical and craft education in addition to book learning is now part of our national educational policy, and in order to comply fully with the Board of Education's requirements, senior school buildings need an increase of approximately 45 per cent. on the floor area of similar buildings erected in 1914, so that quite apart from the fact that new schools have to be erected to serve new housing movements in all parts of the provinces, they have to provide more accommodation per head. Sites have to be bigger not only for the school itself but to provide larger playgrounds and playing-fields. The problem is therefore one in which economy of design and construction can never be disregarded. The Board of Education in their pamphlets provide inspiring guidance in addition to definite information, and far from discouraging experiment, welcome it. Good light and ventilation are of primary importance.

The Boys' Secondary School at Luton was won in competition by Messrs. Marshall and Tweedy. It was one of the first school designs to provide a successful alternative to the quadrangular plan. The architectural treatment is simple and direct, but also imaginative. The bricks used for the main wall surfaces are butter-coloured with some dark purple dressings and plinths. The Harcourt Elementary School, Folkestone, by Mr. E. Wamsley Lewis, is just being completed; a frame construction of ferro-concrete has been employed supporting hollow tile floors.

The Village Colleges, by Mr. Urwin, at Bottisham and Linton, show how pleasing such buildings can be, and the Village College at Impington, by Professor Gropius and Mr. Maxwell Fry, although not completed when I visited it in December, possesses many points of interest.

Entertainment.

New entertainment buildings have been erected during recent years in all parts of the provinces. It is scarcely possible to mention any which have not a new cinema. These are usually of steel-frame construction with brick walls. Their main façades appear to be more and more merely backgrounds for the display of neon lighting, and this fact has been frankly recognised in many recent designs. I think the view of the cinema at Sutton Coldfield, by Mr. H. Weedon, may be regarded as representative of this class of design. The conditions laid down by their owners demand that such buildings shall have publicity value and incorporate the name of the circuit to which they belong. They must also be constructed of materials not too costly in maintenance. In my opinion, the buildings erected by Mr. Weedon, of which this design is typical, fulfil the conditions imposed with skill and show considerable imagination. Their colour is usually pleasant, and they are not defaced by posters.

The De La Warr pavilion at Bexhill, by Messrs. Mendelsohn and Chermayeff, makes little concession to the commercial outlook, but it is a notable contribution to the architecture of the seaside. The Stratford Theatre, by Miss Elisabeth Scott and Messrs. Shepherd and Chesterton, is the only other building for entertainment which has attracted anything aproaching the same public interest and attention.

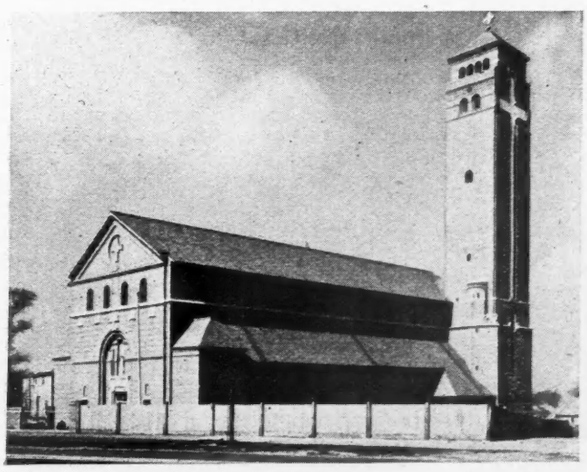
Offices.

The Legal and General Assurance Society's new office block at Birmingham, by Mr. S. N. Cooke, shows considerable originality in the modelling of the façade, which, whilst preserving an appearance of strength, provides ample window openings. Boots' factory at Nottingham is an outstanding example of functional architecture. It was designed by Sir Owen Williams, the well-known engineer.

Domestic Work.

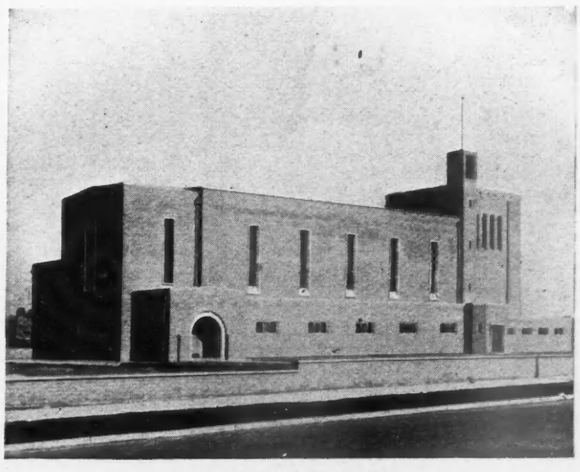
The design of domestic buildings is one of the most pleasant, but at the same time one of most exacting and or erous of an architect's duties. The client, or at least his wife, has often very definite ideas on the subject, and it is not, in my opinion, the function of the architect to override these, but interpret them with technical skill. The results evidence great variety of outlook.

A very charming interior of a house at Henfield, by Messrs. Connell, Ward and Lucas, has great distinction; and a house at Hatfield, by Mr. F. R. S. Yorke, with its high living-room partly clearstory lighted, flat roofs, sun blinds, and simple cubical outline, is typical of a small house in the modern manner. There is also a brick-built house at Edgbaston, by Mr. H. W. Hobbis, which has its garden at the rear with its living-rooms overlooking it. The house at East Farndon, Northants, by Mr. Geo. Nott, is one of the most successful I have seen;



CHURCH AT OLDBURY.

MR. GEORGE DRYSDALE, F.R.I.B.A., ARCHITECT.



CHURCH AT WALSALL.

MESSRS. LAVENDER AND TWENTYMAN, F. & A.R.I.B.A., ARCHITECTS.

ordinary building methods have been employed with modernity of outlook.

Discussion.

MR. J. R. ADAMSON, V.-P.R.I.B.A., proposing a vote of thanks, mentioned the wording of the title of the paper and said it had brought home to him how quickly we were travelling from the day when we had a provincial architecture in the real sense of the word—as apart from merely architecture in the provinces. It was held by many that part of the inevitable march of progress was the disappearance of "provincialism"—in other words, of those variations of self-expression in speech, dress, manners, and, of course, in building and architecture. If that was so, would it all be gain?

If it was so, there would be, at any rate in things architectural, an ironing-out of regional variations and usages in favour of a more commonly accepted and more universal form of expression; and when we had substituted everywhere for local materials, local craft-lore and local workmanship, a slick and machine-made cosmopolitanism, should we have enriched our civilisation, or merely standardised it?

So, concluded the speaker, he would make a plea as against the extreme uniformity which tended to be so marked a feature of ultra-modernism, for a difference of approach to the problems and for the retention of something, at any rate, of a rich regional and local variety of self-expression.

MR. HAROLD A. DOD, F.R.I.B.A., seconding, said it had been a fine thing, the display of pictures of provincial architecture which had passed before them, for every sensible architect must have been on the look-out for the common feature which would point to the foundation of a new national architecture. It had been difficult to see from the pictures precisely what that common feature was, but there was one thing he had noticed and that was the tremendous application to the practical side.

MR. WESLEY DOUGILL, M.A., B.Arch., A.R.I.B.A., M.T.P.I., said that concerning the desirability of a national style of architecture, there were many towns in this country which had a particular individuality and personality of their own, and he felt with Mr. Adamson that it would be a pity if all those towns which, at the present time, were very attractive, were reduced to a single denominator; also, in achieving something for modernity we should lose something much more English and valuable to the country as a whole.

MR. T. A. DARCY BRADDELL, V.-P.R.I.B.A., declared that true provincial architecture was now dying before our eyes.

MR. R. B. CRAZE, F.R.I.B.A., said that in some way or other we English took the traditional elements from the architecture of other countries and then moulded it to fit in with our own essential English ideas; and where the talk had been so helpful was that it had pointed the way to something which they would ultimately achieve. We English always did lag behind, but he thought that we did so with the idea that, having seen what others could do to their advantage, we could then pick up the threads and weave an excellent traditional work.

PROFESSOR THOMAS BODKIN, D.Litt., said that in looking at the slides he felt that the laymen present were not in a position to judge them properly, particularly as there was no standard by which to set a scale. Therefore it was always worth while showing a figure or two near by a building illustrated. A feature of the talk had been Mr. Benslyn's constant reference to the colour of buildings. In modern architecture little attention was paid to colour and we were a little too inclined to rely on the natural colour of stone.

MR. S. E. BRAGG, A.R.I.B.A., looked forward to the day when the standard of architecture in the provinces would be as high as that which they had seen that evening.

[For reasons of space Mr. Benslyn's comments have been considerably condensed—ED.]

THE R.I.B.A. ROAD ARCHITECTURE EXHIBITION

THE promoters of this exhibition (which is now open at 66, Portland-place, W.) inform us in the illustrated brochure which is handed to those who visit the galleries of the Royal Institute of British Architects that there is no attempt here to deal with the whole of national planning. They are content "to examine in some detail one section of that wide and complex subject, the relation between roads and buildings." Before we proceed any further it may be as well to remind ourselves that there is only one way in which buildings can express their æsthetic relationship to a road: that is, by being aligned upon it. If a building or structure of any kind does not, as it were, turn its face to the road and help by its disposition to emphasise the presence of the road, it does not deserve to be called road architecture.

The problem here presented to us is an extremely old one, and it has been admirably solved in innumerable ininstances in past times by the obvious device of giving to a number of buildings a continuous façade which helps to define the boundaries of the road. But in this exhibition most of the examples are of individual structures, which seem almost fortuitously to be situated near roads and show no consciousness of this propinquity by their form and disposition. How can they, therefore, be described as road architecture? The only buildings here shown which really come under this category are confined to a few illustrations of streets in the older towns.

Even the ribbon development which is now so heartily condemned owes its unpopularity far more to the unsuitable architecture exemplified in it than to the supposedly wrong *location* of the buildings. If it had been undertaken in the eighteenth century we should have acknowledged it to be perfectly charming. Large and small houses harmoniously designed in almost continuous alignment, set well back from the traffic route, would have produced an air of spaciousness, and the roads themselves, instead of being desecrated by the buildings, would have received an added dignity by their presence. But while our modern road-side structures, in detached units of various shapes and sizes, fail to contribute to the æsthetic pleasure of the traveller, the roads themselves are for the most part admirable, and the bridges, of which a number of examples are shown in this exhibition, are elegant. The modern roads for fast traffic raise interesting questions of design, some of which do not appear to have been solved. For instance, the double-track road with a grass verge or other dividing member in the centre is an "unrésolved duality" of a most painful kind, and perhaps there is no way of giving such a road unity except by broadening the central non-operative part until it dominates the road composition.

As for the ingenious road crossings of the "clover-leaf" variety, although, of course, we must admit they are a perfect solution of a certain problem, it cannot be said of them that their presence adds to the beauty of the countryside, nor could room for many of them be found in our towns. It is becoming increasingly clear that an immense expansion of our road system, in order to provide tracks for hundreds of thousands more vast motor-lorries and millions more private cars, is not a thing to be contemplated with equanimity, and the time has surely come to reconcile the claims of the motor industry with those of the English people as a whole, whose comfort and convenience will perhaps best be served if, on the one hand, we make more extensive use of the railways, and if, on the other, we prescribe a definite limit to the number of motor vehicles, so that if more than a certain number of people are intent upon careering about in motor-cars they must migrate to the wide open spaces of the Colonies, because little England cannot hold them any more!

As for present projects of building new trunk roads without first making a national plan showing the location of proposed new towns needed to relieve the congestion in the old ones, this is the height of folly. First we must plan the new urban developments and new roads must be related to these.

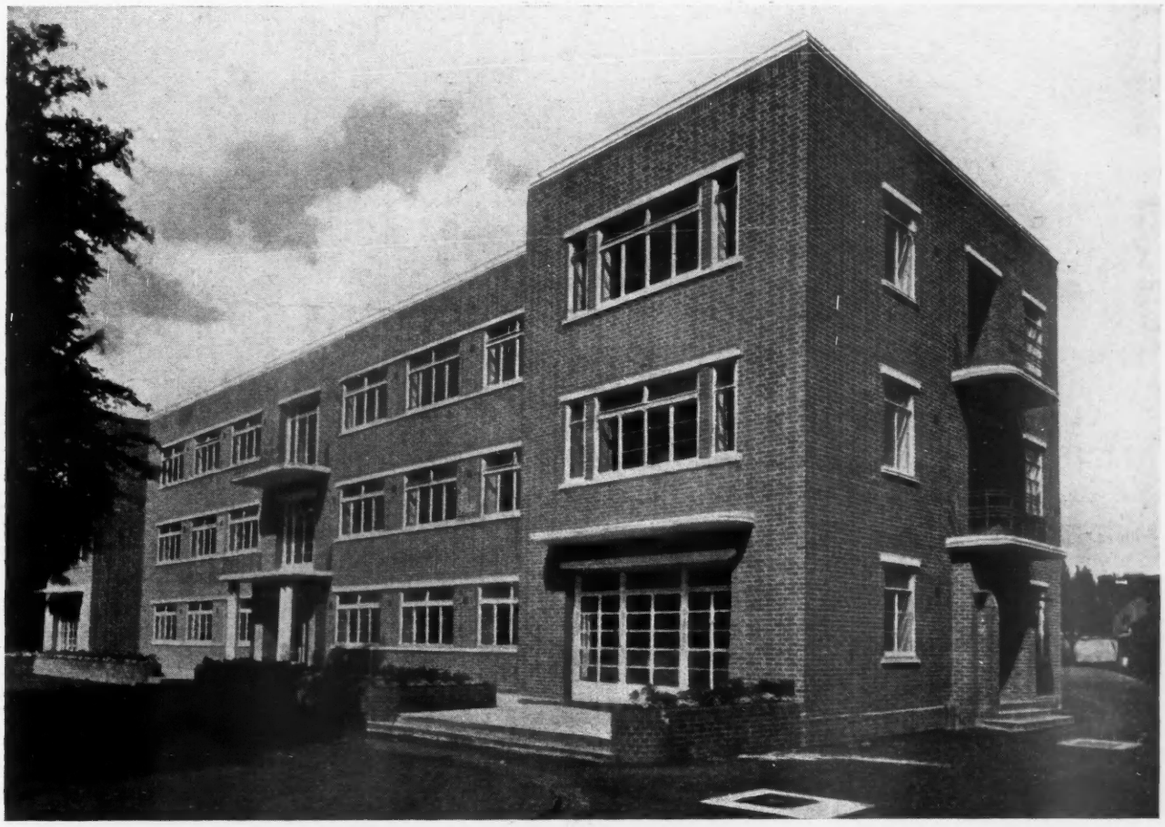
One of the most interesting exhibits is the model of an "ideal" town of 50,000 people, which was made under the direction of the National Town Planning Council. The layout shows clearly the influences to which the students have been subjected. In the first instance we notice the familiar air of architectural detachment which appears to be considered desirable by the exponents of the "Garden City." That is to say, not a single continuous street of the old-fashioned kind is here in evidence, and we jump from small blocks of houses to another small block of houses, or from block of flats to block of flats, and the fascinating problems of design which result from the attempt to plan continuous building are not tackled at all. In this town there is not a single street vista, not a single square or *place*, and none of the features are present which have contributed to the beauty of cities in the past. I am not mentioning this as if it were a criticism, but merely as a fact. The second influence apparent is that of Le Corbusier, whose cruciform office towers have in this instance been made to fulfil a different purpose and are labelled "Communal," by which one is given to understand that they house the administrative offices of the town. Apart from these four "skyscrapers," no other public buildings of importance are in evidence, and I did not see any church in this "ideal" city of the future. The third influence to which the students appear to have been subjected is that of Dr. Gropius, whose standardised flats, composed in thin rectangular blocks, resembling in shape a book on edge, are repeated without a single variation. A similar uniformity distinguishes all the self-contained dwellings, which, we are told, "are constructed of mass-produced units." It appears, therefore, that two or three designs, which could probably be conceived by one person in far less than a day, suffice for a town of 50,000 people, and one cannot help wondering what the poor architectural profession is to do, whose task has been simplified almost out of existence.

But the merit of this town plan is that it has been done at all, and the students are to be congratulated upon having produced a charming model which, it may be hoped, will be followed by others illustrating the same theme in perhaps a slightly different manner.

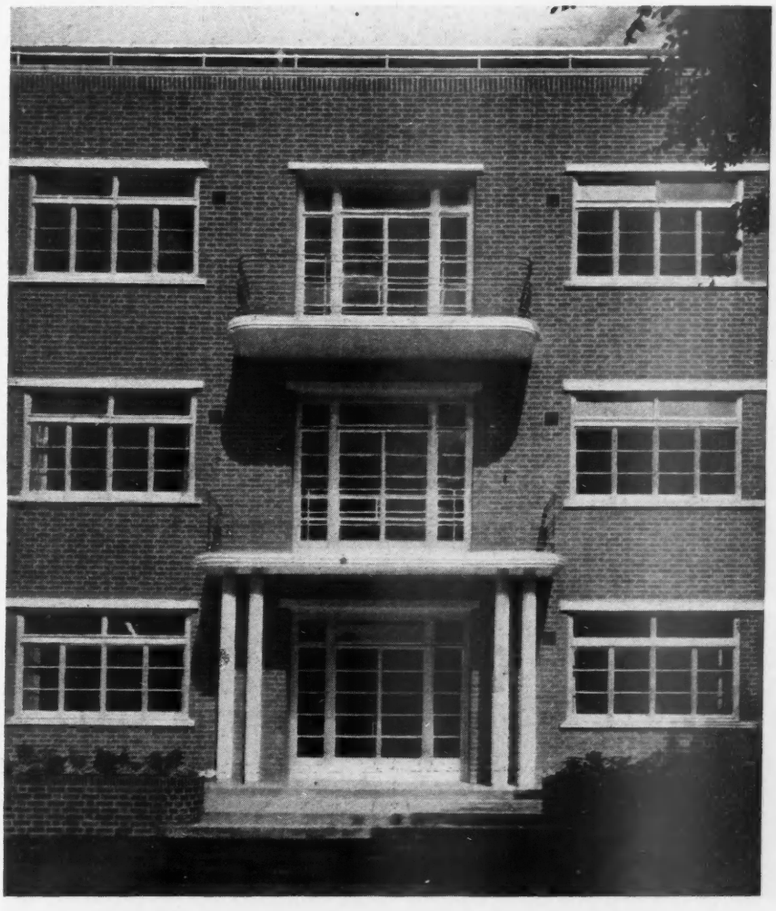
The exhibition, which is arranged in four parts—the road to-day, present development, future development, and an historic section—will be open until March 31.

A. TRYSTAN EDWARDS.

ST. WINIFRIDE'S HOSPITAL, ROMILLY CRESCENT, CARDIFF.



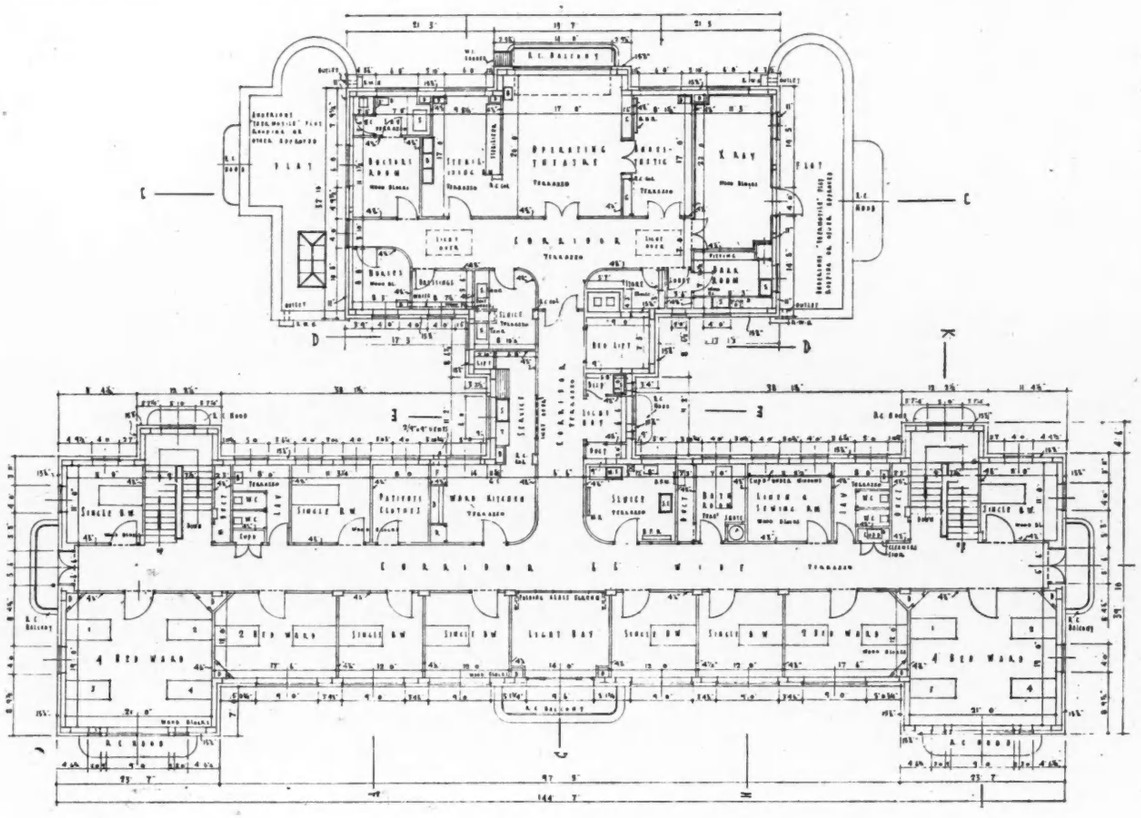
MAIN ENTRANCE FRONT.



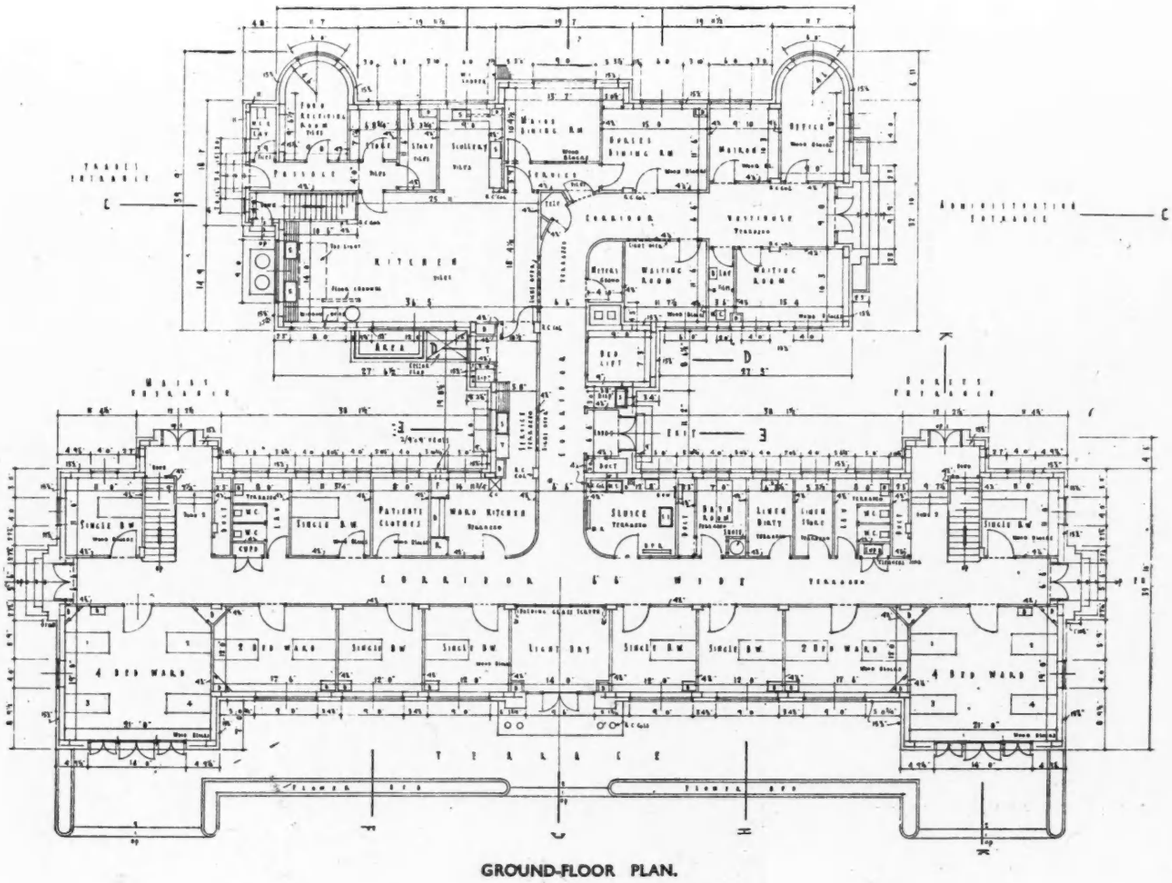
Right : DETAIL OF MAIN ENTRANCE.

MR. CYRIL F. BATES, A.R.I.B.A., ARCHITECT.

ST. WINIFRIDE'S HOSPITAL, ROMILLY CRESCENT, CARDIFF.

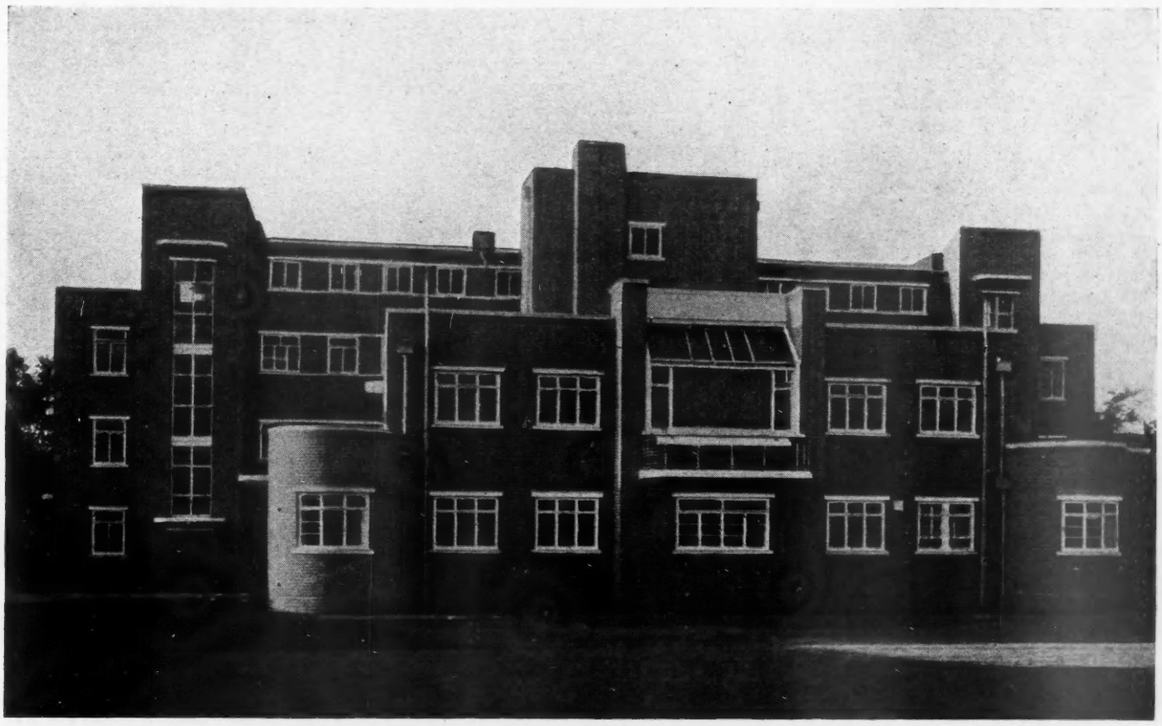


FIRST-FLOOR PLAN.

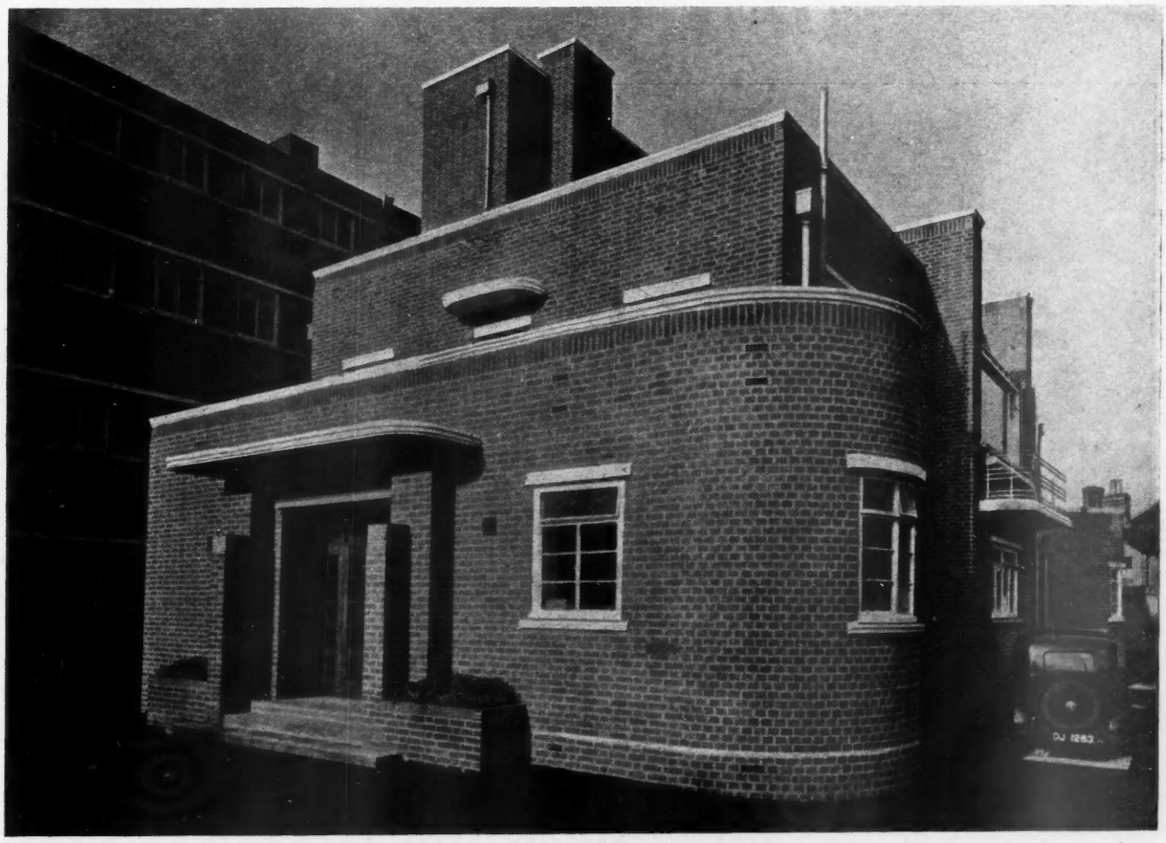


GROUND-FLOOR PLAN.

MR. CYRIL F. BATES, A.R.I.B.A., ARCHITECT.



THE ADMINISTRATIVE AND OPERATING BLOCK.



DETAIL OF ENTRANCE TO ADMINISTRATION.

ST. WINIFRIDE'S HOSPITAL, ROMILLY CRESCENT, CARDIFF.

SCHEME.—St. Winifride's Hospital, which takes the place of the Lord Ninian Hospital, has been designed on the most modern lines as a reinforced concrete-framed structure, faced externally with hand-made bricks. Special precautions have been taken in accordance with the latest A.R.P. requirements, the whole of the structure being of fireproof materials. The accommodation provides for 60 patients, mostly in single-bed wards, and a unit of 144 ft. super. of floor area per patient has been adopted. Accommodation is provided for the nursing and domestic staff on the top floor.

ADMINISTRATION UNIT.—This contains the general offices, matron's office, waiting rooms, kitchen quarters and stores, nurses' and maids' dining-rooms, and dispensary.

WARD UNITS.—Are designed on three floors, all wards being planned with a southerly aspect. The ground-floor wards open on to a paved sun terrace, and sun balconies are designed on each of the other floors so that patients can be wheeled on to these balconies to obtain open air and sun treatment. The windows in all wards are steel folding windows, capable of being opened entirely by folding back to the window jambs. A special feature is the planning of the ward kitchens, which are placed so that direct access is obtained with the main kitchen unit at ground-floor level by means of an electric food lift, the nursing staff thus having minimum distances to travel to distribute food to the several wards. An electric bed lift connects all floors.

OPERATING UNIT.—This is designed at first-floor level, faces north and is planned on the most modern lines. The electric bed lift adjoins the operating unit, which can be cut off from the main hospital by means of swing doors.

NURSES' QUARTERS.—Six separate single bedrooms are provided on the top floor for nurses, and also six single bedrooms for the domestic staff, each with their own staircases. Separate sitting-rooms for the staff face south, and open on to a spacious roof garden.

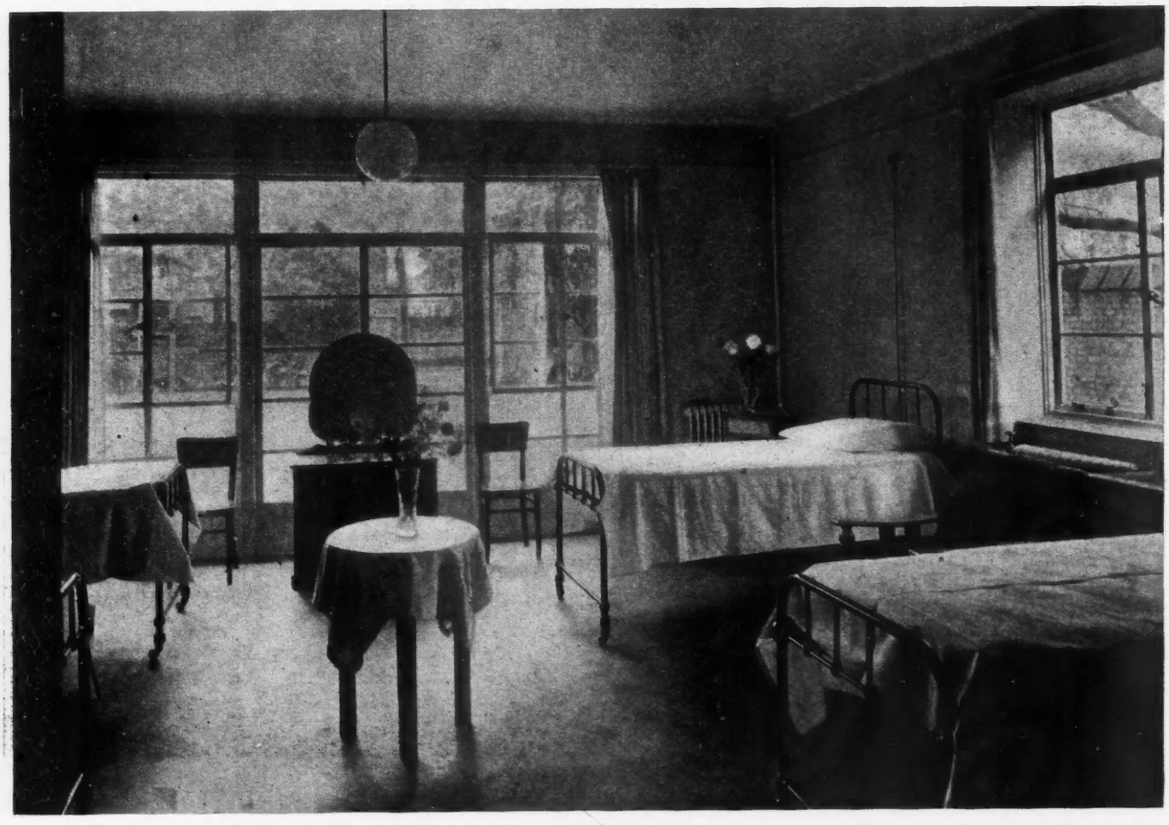
FINISHES.—All angles and corners are rounded and coved to prevent the collection of dust. Walls and ceilings are in hard plaster, painted, and tile dadoes are fixed in all service rooms, kitchens, bathrooms, lavatories and in the operating unit. The floors of all wards are finished in polished gurjun blocks, and the floors in the operating unit, service rooms, lavatories, bathrooms and corridors are in terrazzo in small squares divided with ebonite strips. Special fittings are fixed on all doors, which are flush doors, so that no door can be slammed, and rounded rubber arrises are let into the shutting stiles as an added precaution.

HEATING AND VENTILATION.—The whole of the building is heated by means of a low-pressure hot-water heating apparatus, and the operating theatre and adjoining rooms have steam-heated panels, so that they can be warmed at short notice day or night at any time of the year. The operating theatre unit is air-conditioned.

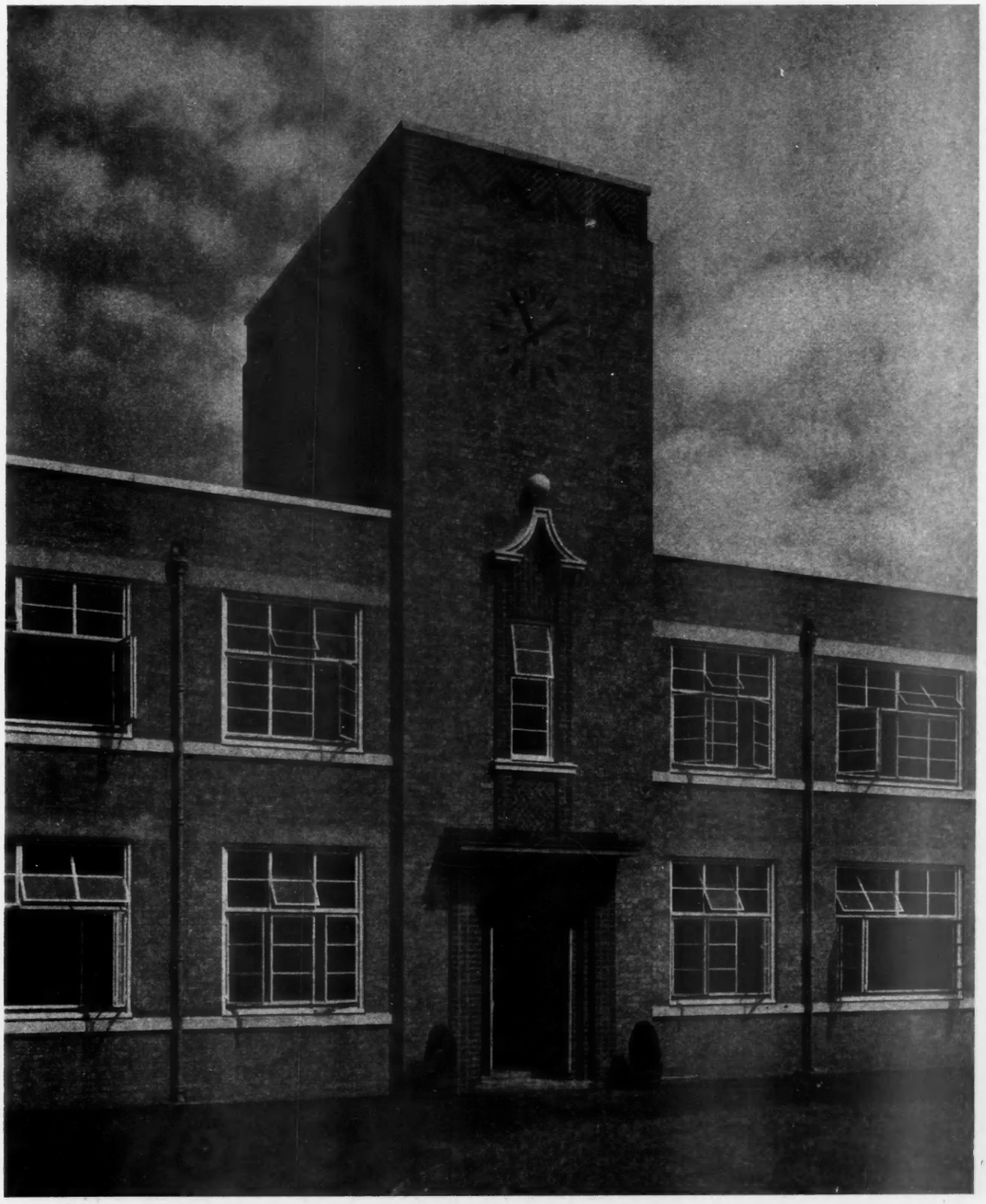
LIGHTING AND WIRELESS. — The lighting system is by electricity. The call system is by means of electric coloured indicators, so doing away with the noise of bells. Each patient is provided with wireless earphones. An elaborate system of internal telephones is installed, so that patients are able to use the telephones from the wards.

The architect for the building is Mr. Cyril F. Bates, A.R.I.B.A., vice-president of the South Wales Institute of Architects, of the firm of Messrs. F. R. Bates and Son, Newport, Mon. Messrs. L. G. Mouchel and Partners, Ltd., were the consulting engineers for the reinforced concrete construction. The general contractors were Messrs. E. A. Bond and Co., of Cardiff, and Mr. S. Organ acted as clerk of works.

Sub-contractors employed in the work were: J. G. Proger and Sons, Ltd., heating engineers; Booth and Bomford, Ltd., electrical engineers; Waygood Otis, Ltd., lifts; James Gibbons, Ltd., windows, locks, instrument cupboards, etc.; Hawkes and Snow, Ltd., theatre blind; Carter and Co., Ltd., tiles; Stevens and Adams, Ltd., wood block floors; Ewart and Son, Ltd., copper roofing; Sissons Bros. and Co., Ltd., paints; Marble Mosaic Co., Ltd., terrazzo; W. A. Baker and Co. (1910), Ltd., wrought-iron railings, etc.; Wm. Adams and Co., asphaltic pavings; Wm. Eyers and Co., Ltd., asphaltic pavings; D. Anderson and Sons, Ltd., "Thermotile" roofing; Coleford Brick and Tile Co., Ltd., bricks; J. C. Edwards, quarry tiles for flooring; Shanks, sanitary goods; Aberthaw and Portland Cement Co., Ltd., cement; Craigye Hesq Quarries, Pennant stone chippings; Hitchin's Flush Woodwork, flush doors; Wake and Dean, wood screens; Cafferata and Co., "Victorite" plaster; Ben D. Gibbs, lightning conductors; Pilkington's, glass; and Penarth Concrete Co., precast stone copings.



A FOUR-BED WARD.

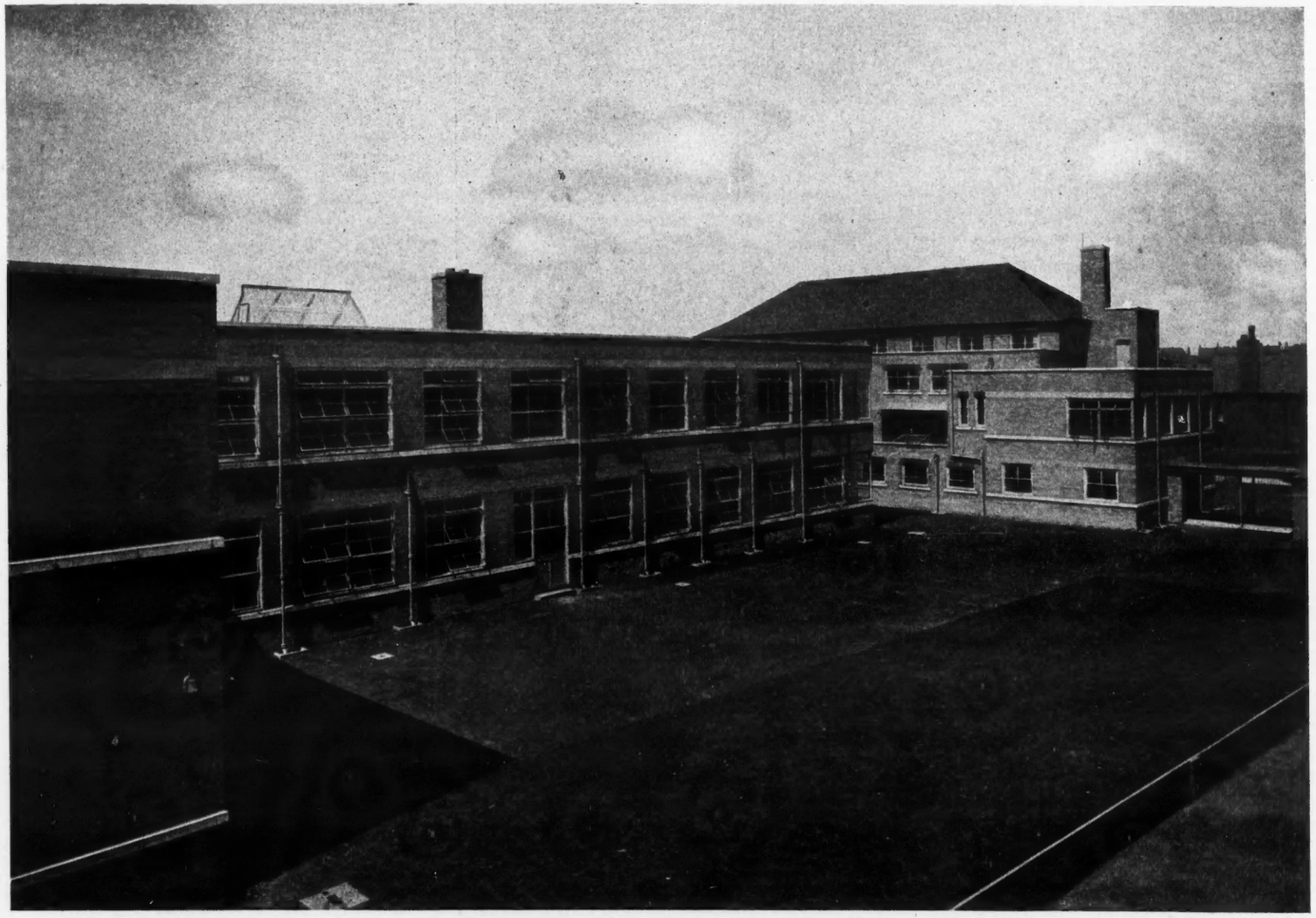


THE MAIN ENTRANCE.

CENTRAL SCHOOL, CORONATION AVENUE, WALLASEY, CHESHIRE.

MR. HAROLD A. DOD, M.A., F.R.I.B.A. (WILLINK AND DOD), ARCHITECT.

NEW CENTRAL SCHOOL FOR BOYS AND GIRLS, CORONATION AVENUE, WALLASEY, CHESHIRE.



THE VIEW LOOKING ACROSS GIRLS' PLAYGROUND.

DESIGNED for the Wallasey County Borough Education Committee, the Coronation-avenue Central Council School shows good expression in the general arrangement of the plan as well as in the treatment of the various façades. Good brick of a pleasant colour and texture has been selected for the exterior, with a limited amount of reconstructed stone for coping and string courses. The school was opened by Lord Derby.

SITE.—The site on which the school has been erected was purchased as long ago as 1910, and is somewhat restricted when compared with present-day standards. (It should, however, be mentioned here that the Education Committee have now completed the lay-out of a playing field of 14 acres on Leasowe-road for the use of this school.) It was, therefore, necessary to plan a two-storey building, with the accommodation for boys on the ground floor, and for girls on the first floor.

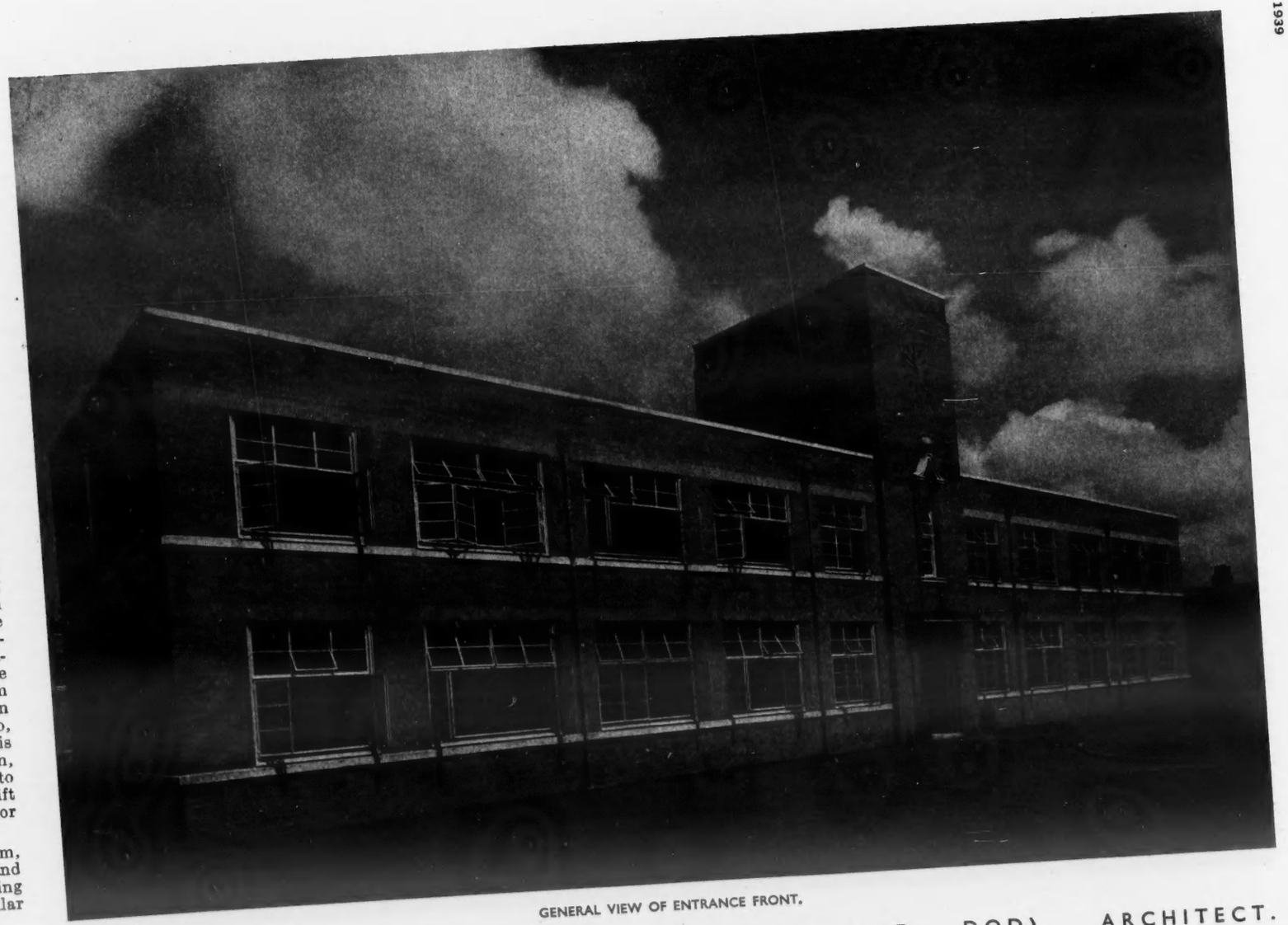
PLAN.—The various rooms are arranged in three groups. The block facing Coronation-avenue, incorporating the clock tower as a dominating feature, is placed across the site and on the axis of Coronation-avenue, and contains the ordinary classrooms, libraries and head teachers' rooms. Two of the classrooms on each floor are specially fitted up for the teaching of geography and history. The centre block houses the practical science, art and craft, woodwork, metalwork, domestic science and preparation rooms. Each practical room has a large store room adjoining. A flat for instruction in housewifery is adjacent to the larger

domestic science room, and contains two kitchenettes—one "all-gas" and the other "all-electric."

Dining-rooms, with kitchen, servery and pantries, are also included in the centre section. The north block is connected with the centre block by wide corridors containing large cases for the exhibition of pupils' work, and incorporates the assembly halls, with ample stages and ante-rooms, cloakrooms, lavatories, and cabinets for the drying of wet clothes.

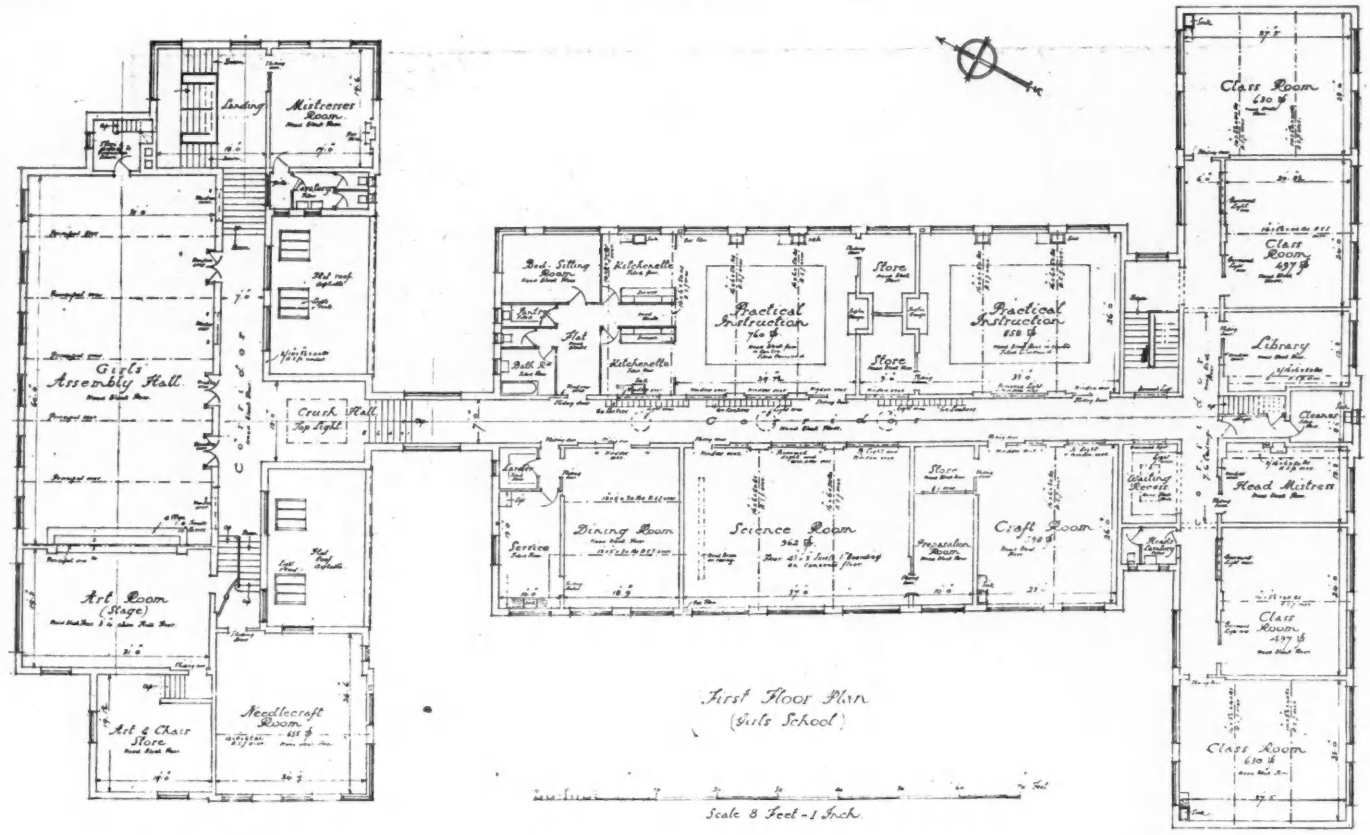
INTERNAL ARRANGEMENT.—Internally each block has been treated in a distinctive manner. The classrooms have beechwood block floors with birnut borders; the walls are finished in plaster painted in tones of light buff with a light green dado. Each room is provided with ample blackboard space and exhibition panels. The practical block is faced internally with sand-lime bricks treated with "Glazement" of a pleasant blue colour, the woodwork being finished in a darker blue tone. Portions of the floors of the practical rooms are laid with tiling. The assembly halls are painted in light buff with a varnished dado and a special decorative treatment in the approximate school colours round the proscenium openings. Above the proscenium in each hall is the school motto, "Noblesse Oblige." Each hall is fitted up for sound-film projection, an increasingly important aid to modern educational methods. A lift to pass the projector from one floor to the other is provided.

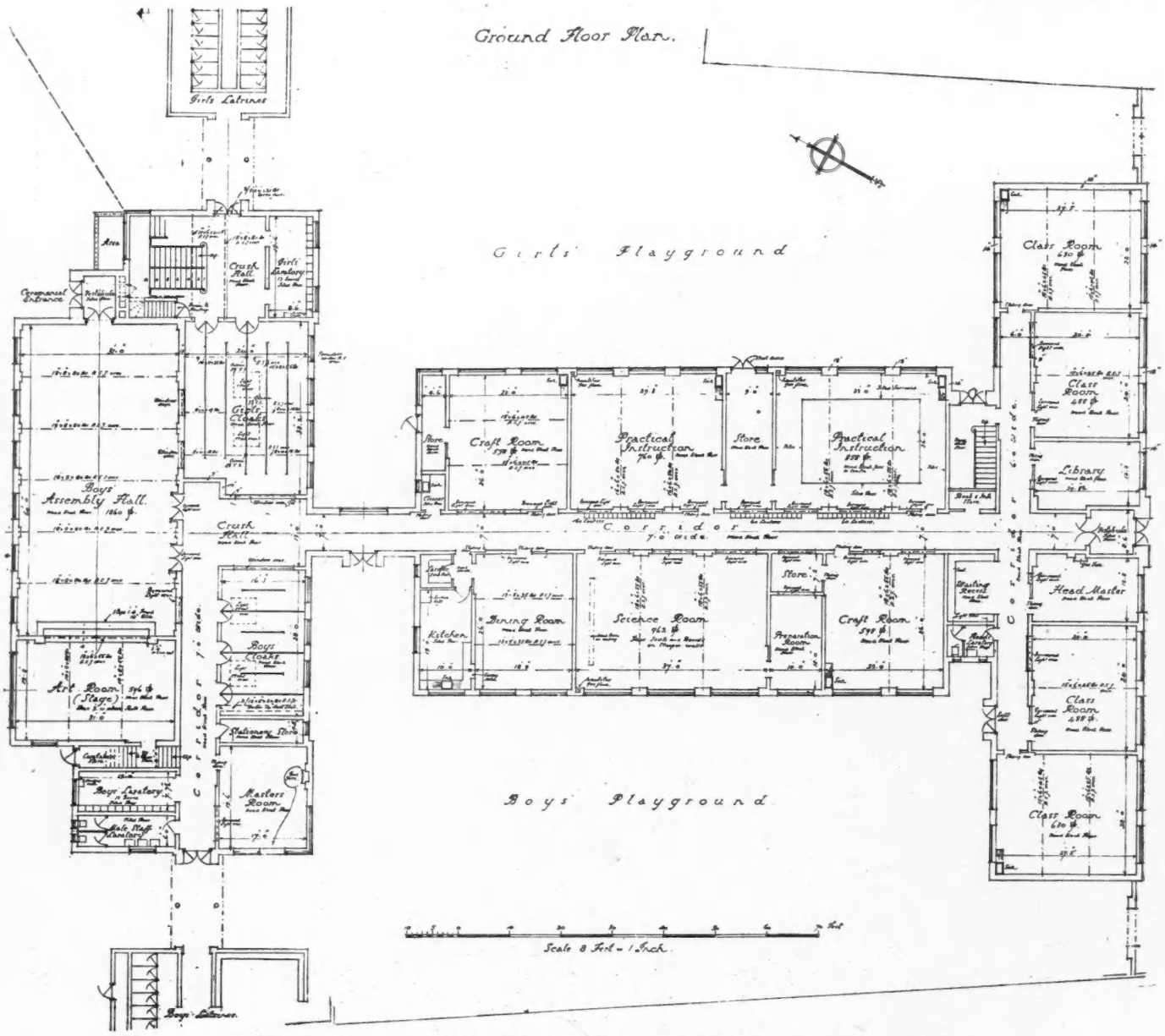
The fully-equipped gymnasium, with its changing rooms and showers, is a separate building faced externally with bricks similar



GENERAL VIEW OF ENTRANCE FRONT.

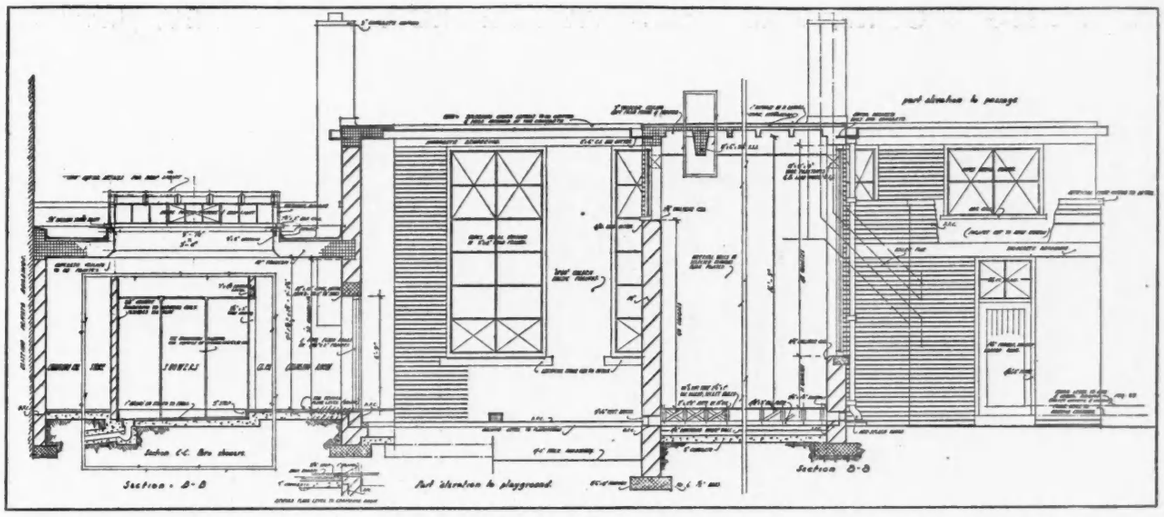
MR. HAROLD A. DOD, M.A., F.R.I.B.A. (MESSRS. WILLINK AND DOD), ARCHITECT.





CENTRAL SCHOOL, CORONATION AVENUE, WALLASEY, CHESHIRE.

MR. HAROLD A. DOD, M.A., F.R.I.B.A. (WILLINK AND DOD), ARCHITECT.



SECTION B-B. PART ELEVATION TO PLAYGROUND. PART ELEVATION TO PASSAGE.

to the main building, and internally with specially selected bricks with a plain colour-washed ceiling. The general appearance aimed at is that of simple efficiency combined with good proportions. The corridors are laid in oak blocks with birnut borders. Several special features will be noticed: sliding doors to teaching rooms; hot and cold water laid on to all lavatory basins; metal-framed windows with special opening gears; "Vesta" gas-fired heating boilers; a roof greenhouse for use in connection with the laboratories; and electric clocks and signal bells.

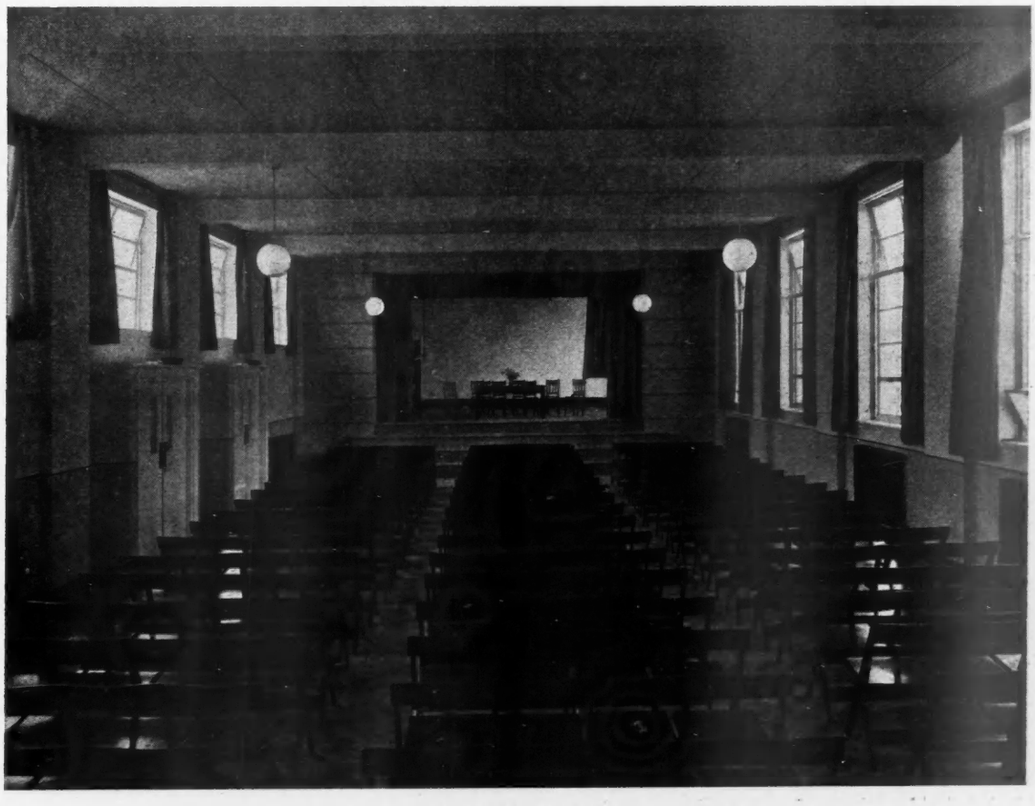
As the pupils attending this school are drawn from the whole borough, ample cycle accommodation is provided for their use.

The building provides accommodation for 320 boys and 320 girls.

The quantity surveyors were Messrs. J. E. Bladon and Son, of Liverpool. The clerk of the works was Mr. R. A. Edwards, and the general contractors Messrs. R. Costain and Sons, of Liverpool.

Sub-contractors and suppliers engaged upon the work were: woodblock flooring, R. W. Brooke and Co., Ltd., Liverpool; sanitary fittings, Musgraves, Ltd., Liverpool; metal-framed windows and sliding doors, Henry Hope and Sons, Ltd., Liverpool; cycle racks, James Gibbons, Ltd., Wolverhampton; electric clocks, Synchromatic Co., Ltd., Liverpool; "Vesta" heating boilers, Autocontrol Boilers, Ltd., London; heating, Saunders and Taylor, Ltd., Manchester; paint and enamel, Walpamur Co., Ltd.; floors and roofs, Trussed Concrete Steel Co., Ltd.; "Glazement," Hoyle, Robson, Barnett and Co., Ltd.; bricks, Ravenhead Brick Co., Ltd., St. Helens; ceilings, Celotex, Ltd.; and steel, McIntyre and Son.

Supplies of furniture and equipment were: "Eco" drying cabinets for wet clothes and for domestic science rooms, J. Glover and Sons, Ltd., London; desks and chairs, Kingfisher, Ltd.; furniture and fittings, Midland Educational Co., Ltd., Birmingham; and gymnastic apparatus, Niels, Larsen and Son, Ltd., Leeds.



THE ASSEMBLY HALL.

CENTRAL SCHOOL, CORONATION AVENUE, WALLASEY, CHESHIRE.

MR. HAROLD A. DOD, M.A., F.R.I.B.A. (WILLINK AND DOD), ARCHITECT.

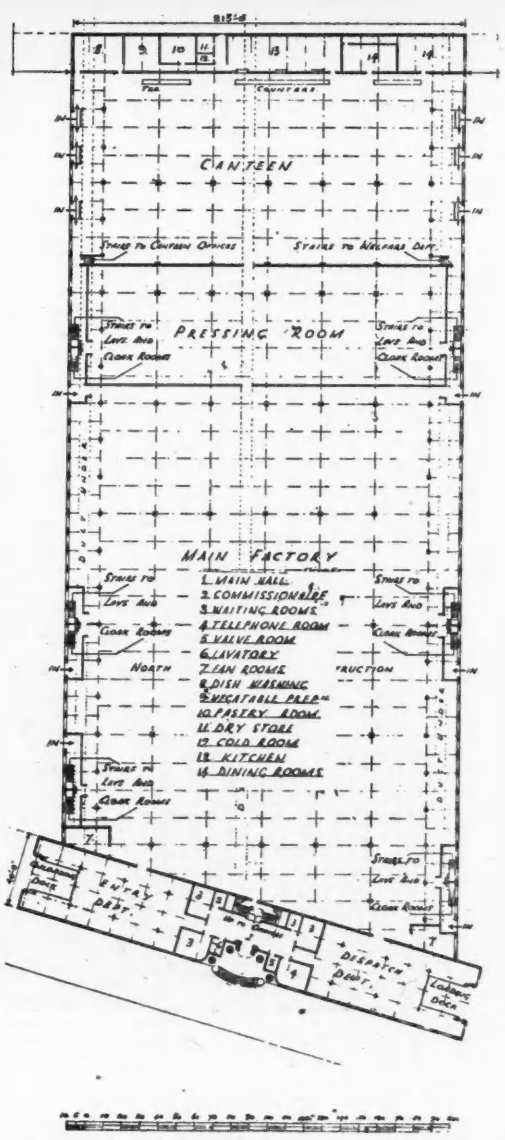
CLOTHING WORKS, EAST LANCASHIRE ROAD, WORSLEY, LANCS.

Messrs. Montague Burton, Ltd., the tailors, whose head office and main factory are situated in Leeds, have acquired 25 acres of land on the north side of the East Lancashire-road, situated above five miles from the centre of Manchester, for the purpose of erecting a subsidiary factory. The negotiations for the acquisition of the property were materially assisted by the Lancashire Industrial Development Council, who have been the prime movers in bringing new industries to those districts in Lancashire seriously affected by the depression in the cotton industry.

It is proposed to build in three sections. The present unit comprises an area of 12,000 sq. yds. on the ground or factory floor, which will accommodate about 2,000 workers. The key-note of the planning is simplicity, and the welfare of the workers has been most carefully studied. The building is air-conditioned throughout, and the large canteen provided, which is included in the main factory block, will accommodate 1,800 people at one sitting. A complete welfare centre is provided. The main elevation facing East Lancashire-road has been designed on modern principles applicable to modern factory premises, having a horizontal treatment with a central tower rising over the main entrance, the latter being approached by a 46-ft. wide central stair flanked with terra-cotta pedestals. The tower is 80 ft. above the road level. The material chosen for the main facings is red Accrington pressed facing bricks with buff terra-cotta dressings, and the piers between the windows are faced with black terra-cotta with strips of buff. These materials were chosen for their weathering properties, and having smooth faces can be kept clean with the minimum amount of maintenance. A service block is built at the rear of the factory as a separate unit.

In order to avoid unsightly overhead trunking, underground ducts of reinforced concrete have been built, and washed, filtered and warmed air is brought in through these ducts and discharged into the factory and extracted through roof ventilators. The work was carried out by direct labour. Sub-contractors are on page 494.

One of the canteen walls has been decorated with mural paintings depicting the evolution of a suit from the shearing of the sheep to the selling of the finished garments. These paintings were carried out by Mr. T. E. Murphy.



MESSRS. WALLIS, GILBERT AND PARTNERS, IN ASSOCIATION WITH MR. NATHANIEL MARTIN, A.R.I.B.A., ARCHITECTS.

"SHAFTESBURY HOUSE," BEESTON: A LODGING HOUSE FOR LEEDS C.C.

MR. R. A. H. LIVETT, A.R.I.B.A., HOUSING DIRECTOR.

SHAFTESBURY HOUSE is a lodging house planned to provide accommodation for 324 men and 192 women, all permanent or casual lodgers.

THE building is of brick construction with cavity walls, faced with straw-coloured bricks set with raked joints, and the roofs, other than flat roofs, covered with hand-made sand-faced golden-brown tiles. The windows are steel casement windows throughout, the floors and staircases of fire-resisting construction, and the floors generally finished with wood blocks.

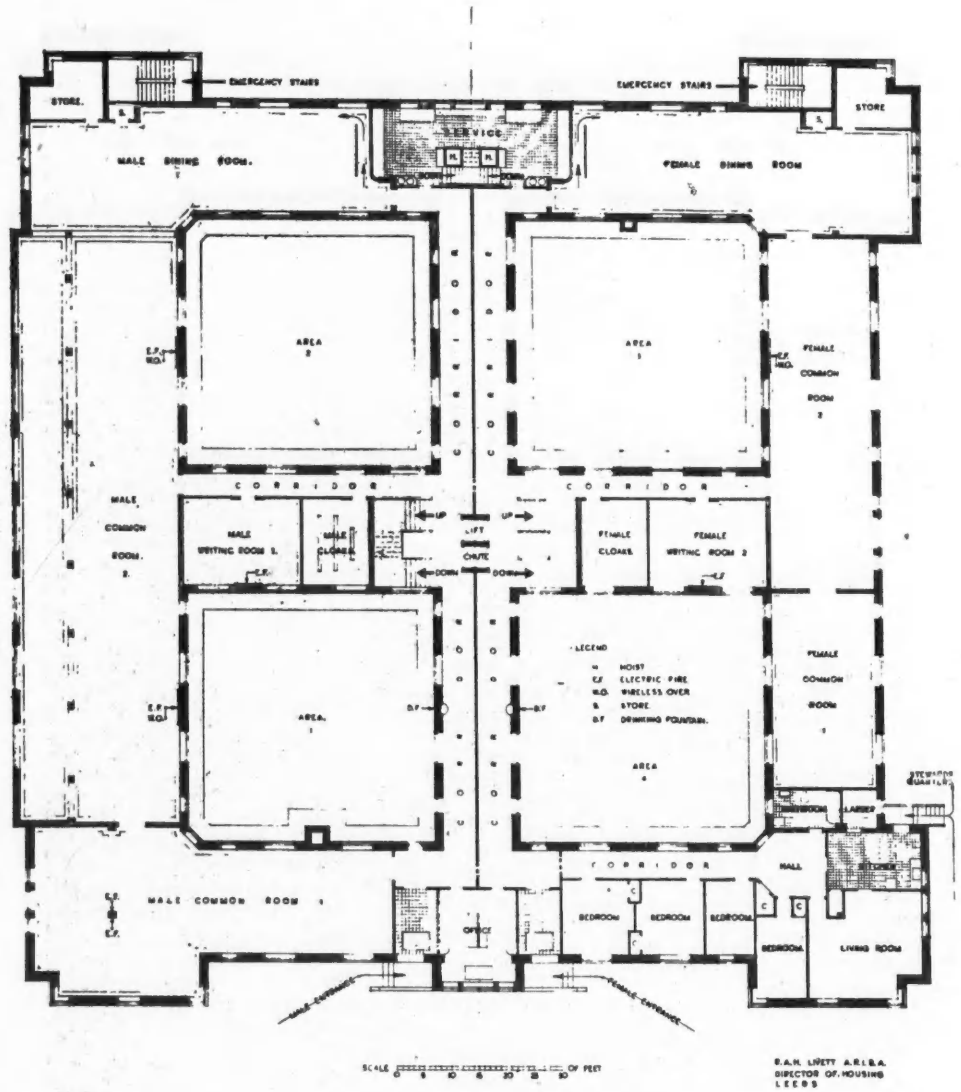
PLANNING.—The building is divided into two sections, one for men and one for women, each section being self-contained, but sharing common services such as the reception office, kitchens, laundry, boiler house, stewards' quarters, etc.

SEMI-BASEMENT provides for a large laundry with electrically driven equipment, linen store, and, adjoining, a boiler house with gas-fed hot water and central heating services, engineers' shop and store, fumigating chamber fitted with delousing apparatus, male and female locker rooms fitted with sheet steel lockers, parcel stores, etc. Leading from the locker rooms are the lavatory suites.

GENERAL VIEW OF ENTRANCE FRONT.

DETAIL OF MAIN ENTRANCE.

"SHAFTESBURY HOUSE," BEESTON: A LODGING HOUSE FOR LEEDS CITY COUNCIL.



GROUND-FLOOR PLAN.

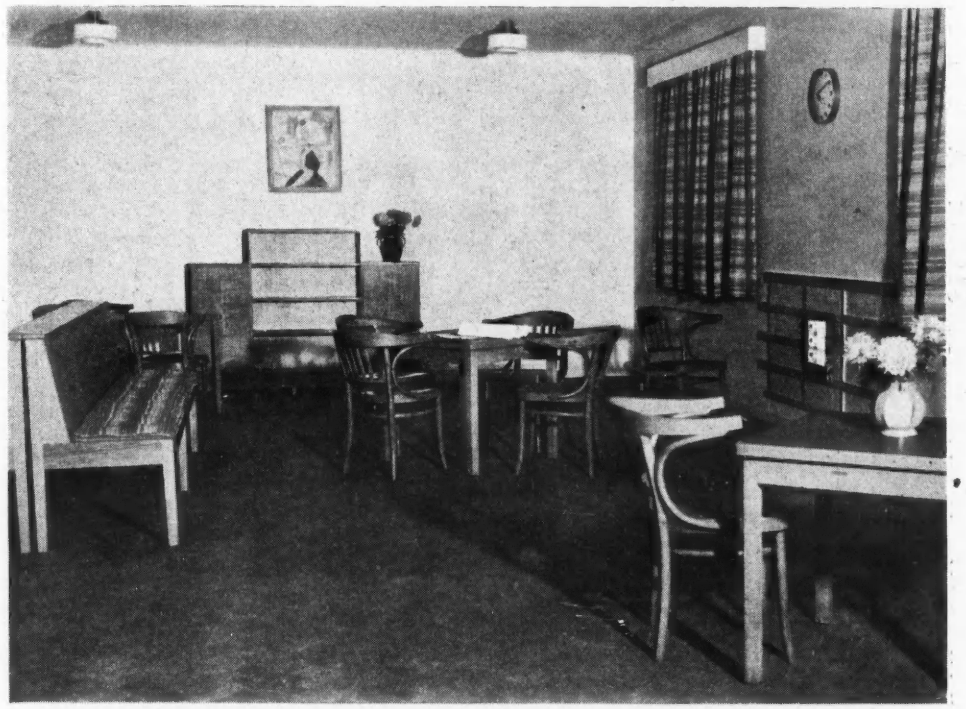
GROUND FLOOR.—Separate entrances are provided for men and women, the two entrances being divided by the reception office.

UPPER FLOORS.—On each of the first, second, third and fourth floors provision is made for 129 lodgers' bedrooms, 81 (11 of them small) for men and 48 for women.

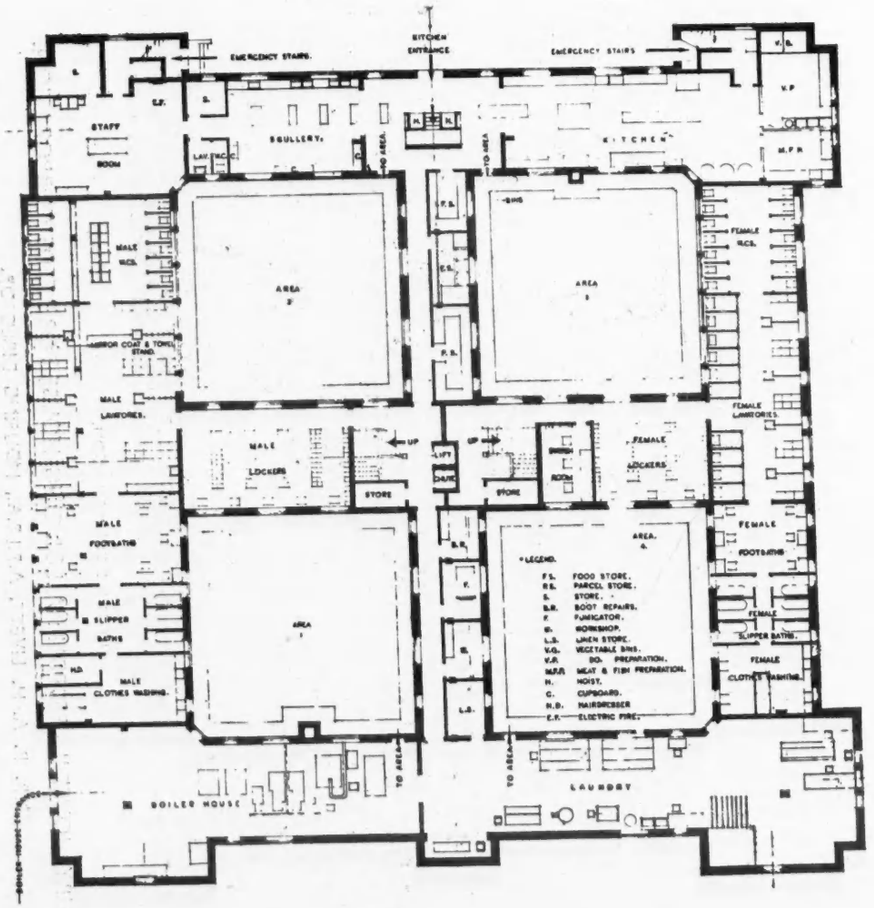
COSTS.—Building, site works, and administration, £54,923; furniture, etc., £7,700.

The general contractors were Messrs. N. B. Bell & Co., Ltd., King's-avenue, S.W.4.

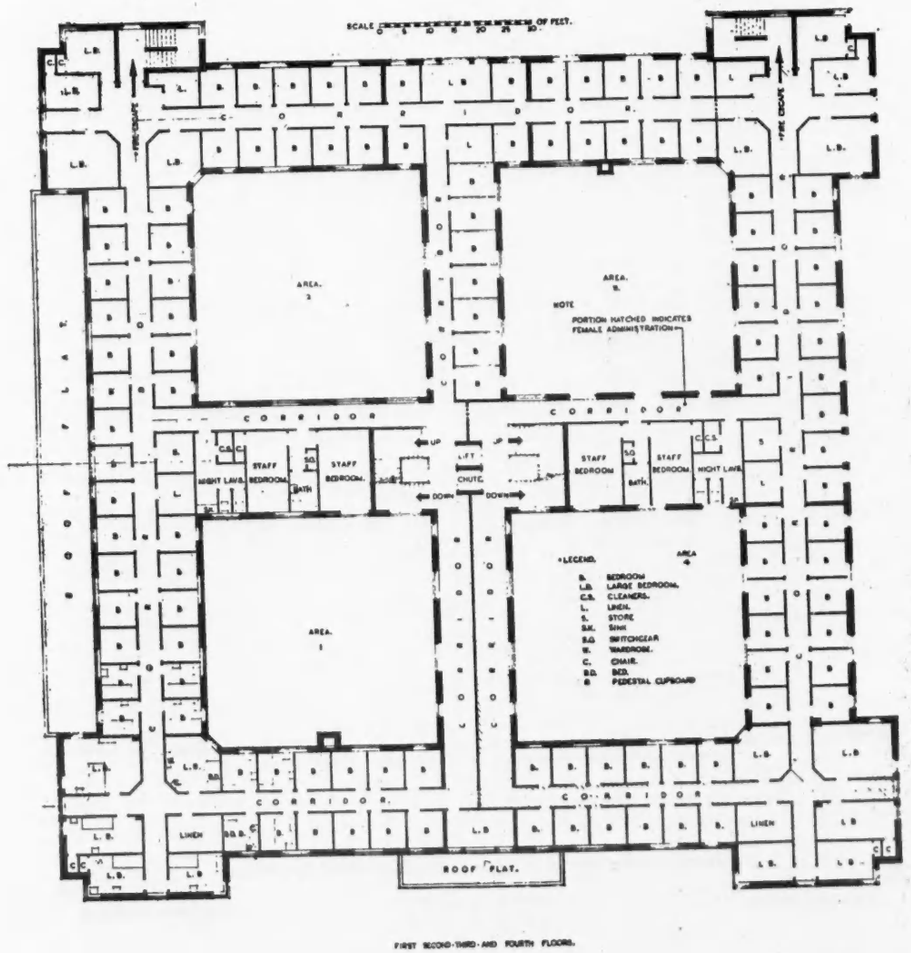
Sub-contractors were: Plasterer, James Phillips; electrician, N. G. Bailey and Co., Ltd.; painting, T. H. Rusling; excavating, Otty Bros.; roof covering, H. Nelson, Ltd.; asphalting (roofs), Northern Asphalte and Roofing Works Co., Ltd.; lifts and goods hoists, Rawlinson's, Ltd.; turfing, H. O. Andrews, Ltd.; planting, R. V. Roger; heating, etc., Hopes Heating and Lighting, Ltd.; laundry fittings, Frank Watson; kitchen equipment, Mabbott and Co., Ltd.; patent floors, Twisteel Reinforcement, Ltd. (laid by N. B. Bell and Co., Ltd.); tar paving, Ragusa Asphalte Paving Co., Ltd.; disinfector, Aveling Barford, Ltd.; wireless relay, West Riding Radio Relay Service, Ltd.; iron railings, Patchett and Co.; balustrades, James Haigh; steelwork, Dunlop and Ranken, Ltd.; and windows, Crittall Manufacturing Co., Ltd.



CORNER OF WOMEN'S COMMON ROOM.



SEMI-BASEMENT PLAN.



FIRST SECOND THIRD AND FOURTH FLOORS.

TYPICAL FLOOR PLAN.

MR. R. A. H. LIVETT, A.R.I.B.A., LEEDS HOUSING DIRECTOR.

A STAIRCASE LANDING.

THE MEN'S COMMON ROOM.

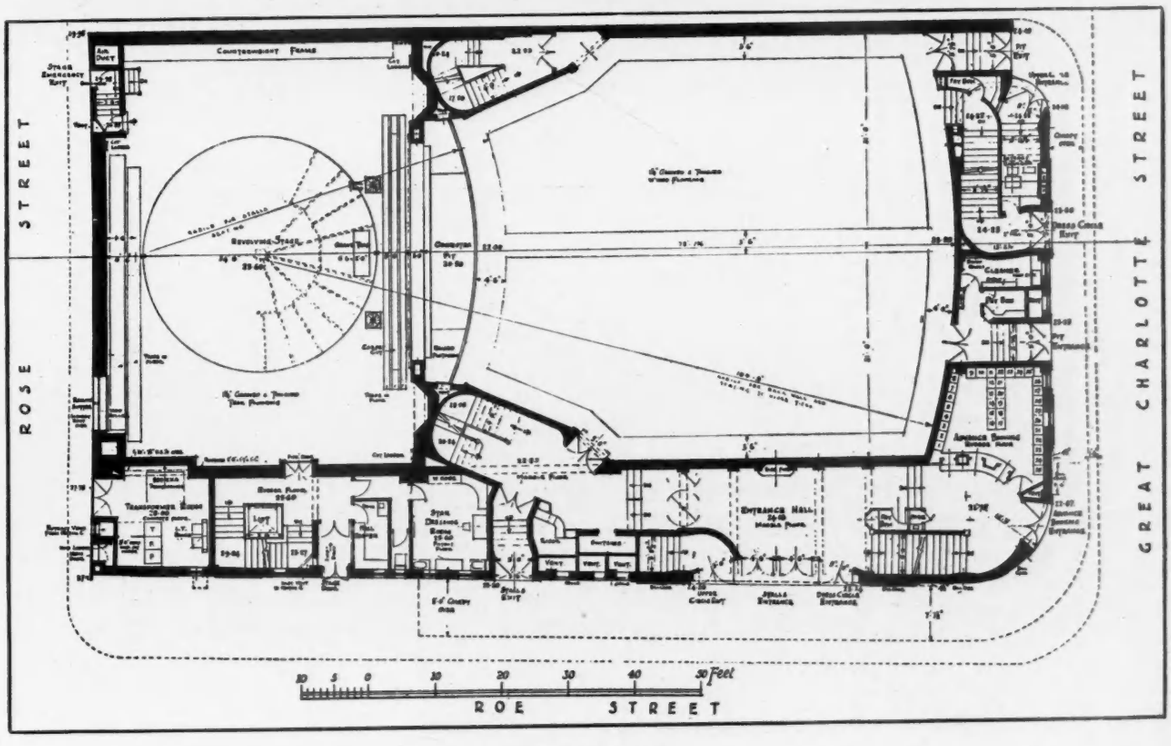
"SHAFTESBURY HOUSE," BEESTON : A LODGING HOUSE FOR LEEDS CORPORATION.

MR. R. A. H. LIVETT, A.R.I.B.A., HOUSING DIRECTOR.

THE ROYAL COURT THEATRE, ROE STREET, LIVERPOOL.

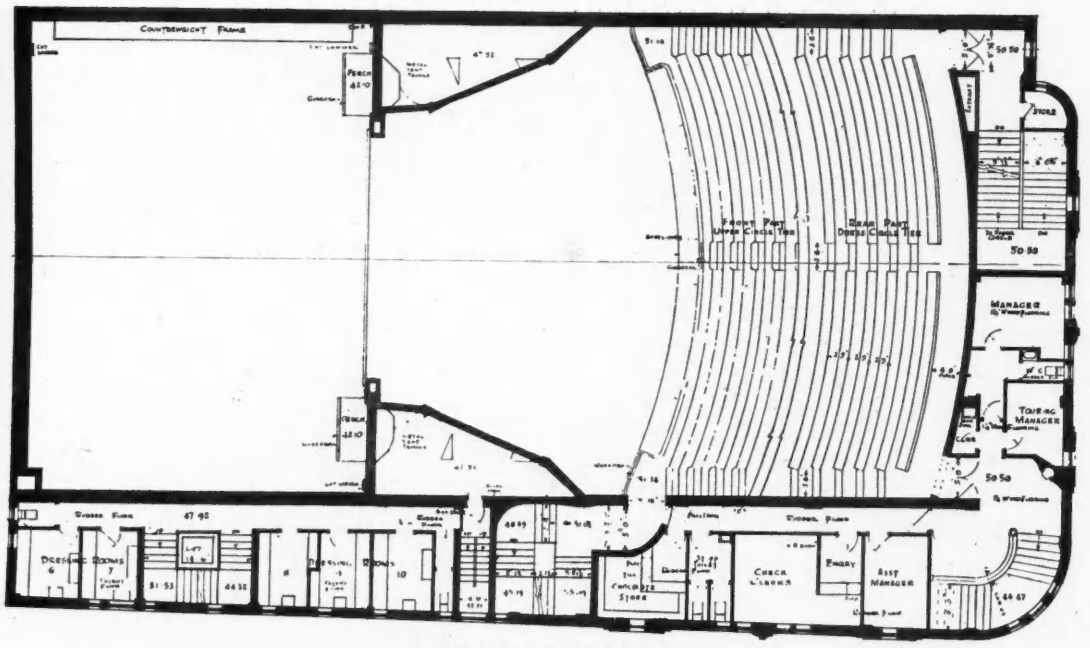
MESSRS. T. WAINWRIGHT AND SONS, ARCHITECTS.

GENERAL VIEW.

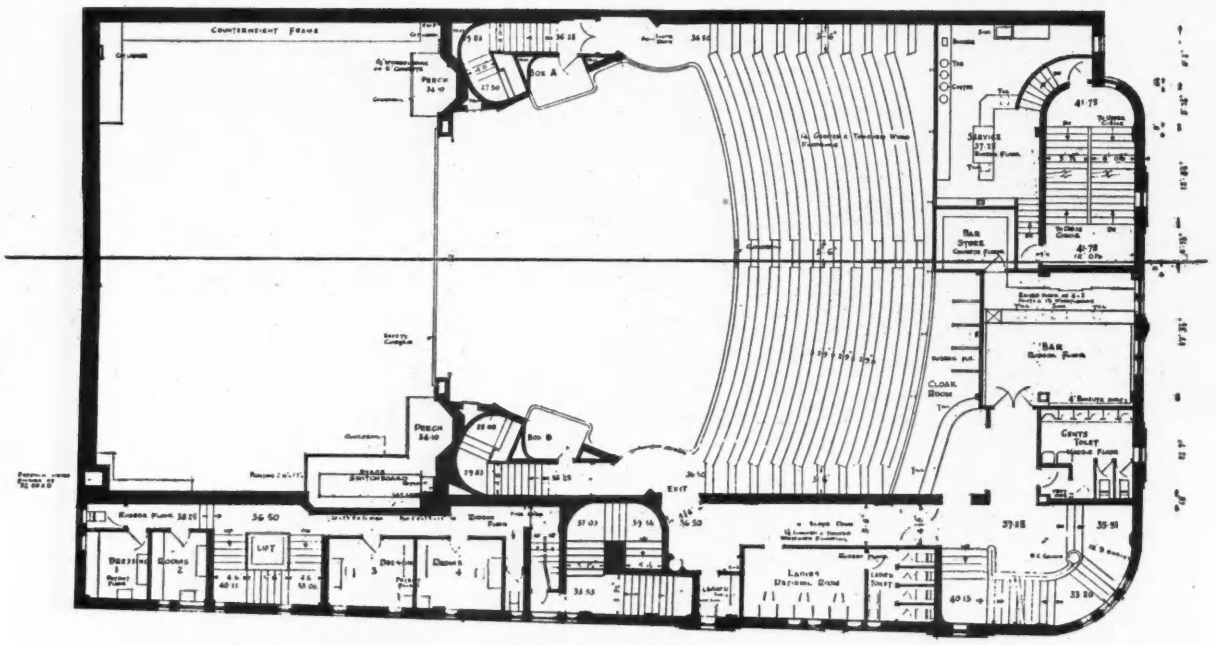


THE STALLS PLAN.

THE ROYAL COURT THEATRE, ROE STREET, LIVERPOOL.



UPPER DRESS CIRCLE PLAN.

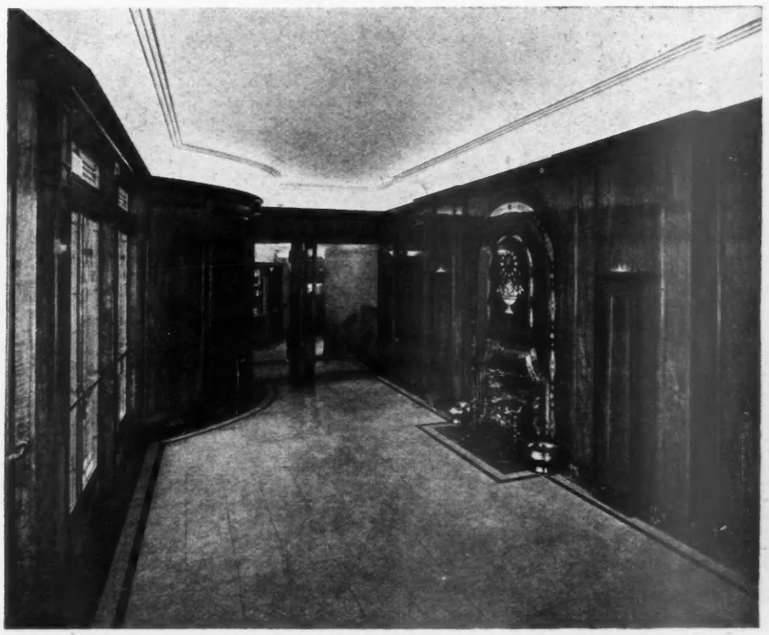


DRESS CIRCLE PLAN.

BASEMENT PLAN.

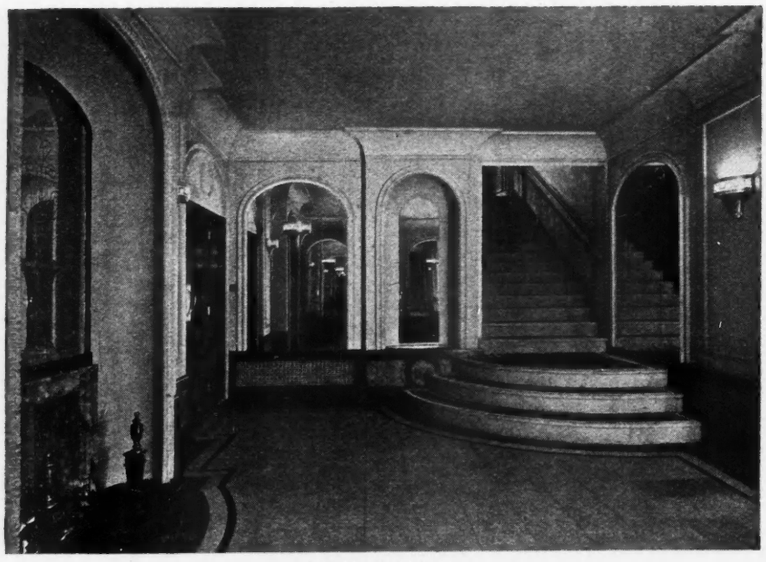
MESSRS. T. WAINWRIGHT AND SONS, ARCHITECTS.

THE AUDITORIUM.



Right : THE ENTRANCE HALL

THE ROYAL COURT THEATRE, ROE STREET, LIVERPOOL.



BASEMENT FOYER.

BASEMENT LOUNGE.

BASEMENT BAR.

SITE.—The site of this theatre (which has been entirely rebuilt) has a frontage to Roe-street of 142 ft. 3 in., to Great Charlotte-street of 82 ft. 3in., and to Rose-street of 79 ft.

CONSTRUCTION.—The building is a steel-framed structure of fireproof construction, with the floors and roofs of reinforced concrete and fireclay tubes. The elevations are faced with a warm shade of Blockley facing bricks, with Ackworth stone dressings and Aberdeen granite architraves to main entrances and exits.

FINISHINGS.—The main entrance doorways are of bronze, flanked with Aberdeen granite facings. The entrance hall, in which are the booking offices, is marble paved and the walls are walnut panelled. The main stairs are marble. Dado and balustrades are supplied with bronze handrails. From the main entrance hall access is obtained to the basement foyer, and immediately adjoining are the cloakrooms, ladies' retiring rooms and the usual offices.

The large and luxurious basement lounge and bar can be approached at different points from the grand circle and stalls, and are designed to form a convenient rendezvous for patrons.

The auditorium will accommodate 703 people in the stalls; 403 people in the grand circle; and 494 people in the upper circle. The grand circle is provided with separate cloakroom and bar accommodation, as also is the upper circle.

Administrative offices are provided on the second floor communicating with the grand circle and upper circle tiers, to facilitate easy supervision by the managerial staff. The operator's unit is above the rear of the upper circle.

The stage, which is 62 ft. wide and 45 ft. deep, has been specially designed to enable productions to be shown in the most attractive manner, both as regards ease of working and thoroughly efficient lighting. The counterweight system provides for 87 sets of scenery and the revolving stage has a diameter of 34 ft. 6 in. These together, it is expected, will enable scenes to be set much more rapidly. There are 19 dressing rooms all fitted up with wardrobes, dressing tables, lavatory basins with hot and cold water, and separate means of fire escape.

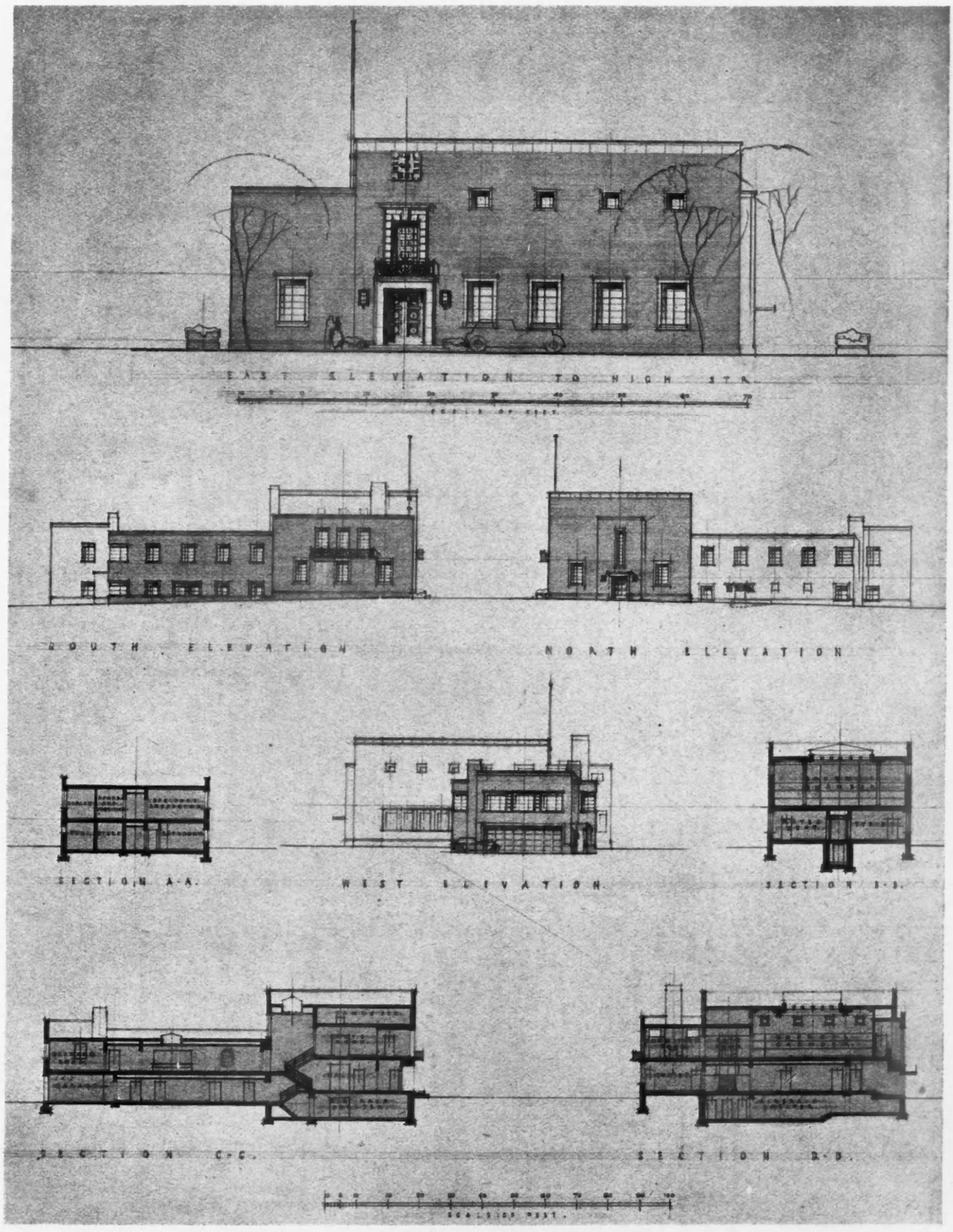
The general contractors were Messrs. Rimmer Bros. (Liverpool), Ltd., and sub-contractors were:—

Mather and Platt, Ltd., fire doors and fire protection services; Marryat and Scott, Ltd., electric lift, etc.; Young, Austen and Young, Ltd., heating and ventilating; John Stones, Ltd., roller shutter; Crittall Manufacturing Co., Ltd., casement windows, haystack lantern light; B. Cohen and Sons, Ltd., interior decorations; Sturtevant Engineering Co., Ltd., vacuum cleaning plant; Merryweather and Son, safety curtain; Lift and Engineering, Ltd., revolving stage, etc.; J. B. Johnson and Co., Ltd., concrete floors and roofs, etc.; Redpath Brown and Co., Ltd., steelwork; E. and C. Smitton, Ltd., carved stonework; Blockleys, Ltd., bricks; J. and H. Patteson, Ltd., marblework; Quiggin Bros., Ltd., metal canopy; Vulcanite, Ltd., roofing; McGoff and Vickers, Ltd., electrical work; North British Rubber Co., Ltd., rubber floors; Beck and Windibank, Ltd., seating; Merseyside Terrazzo Composite Flooring Co., Ltd., composition flooring; J. R. Pearson (Birmingham), Ltd., metal balustrades, handrails, etc.; and J. G. Nicholls, Ltd., glazing.

MESSRS. T. WAINWRIGHT AND SONS, ARCHITECTS.

COMPETITION FOR NEW COUNCIL OFFICES, BEDWORTH.

WINNING DESIGN: BY MR. HARRY WEEDON, A.R.I.B.A.



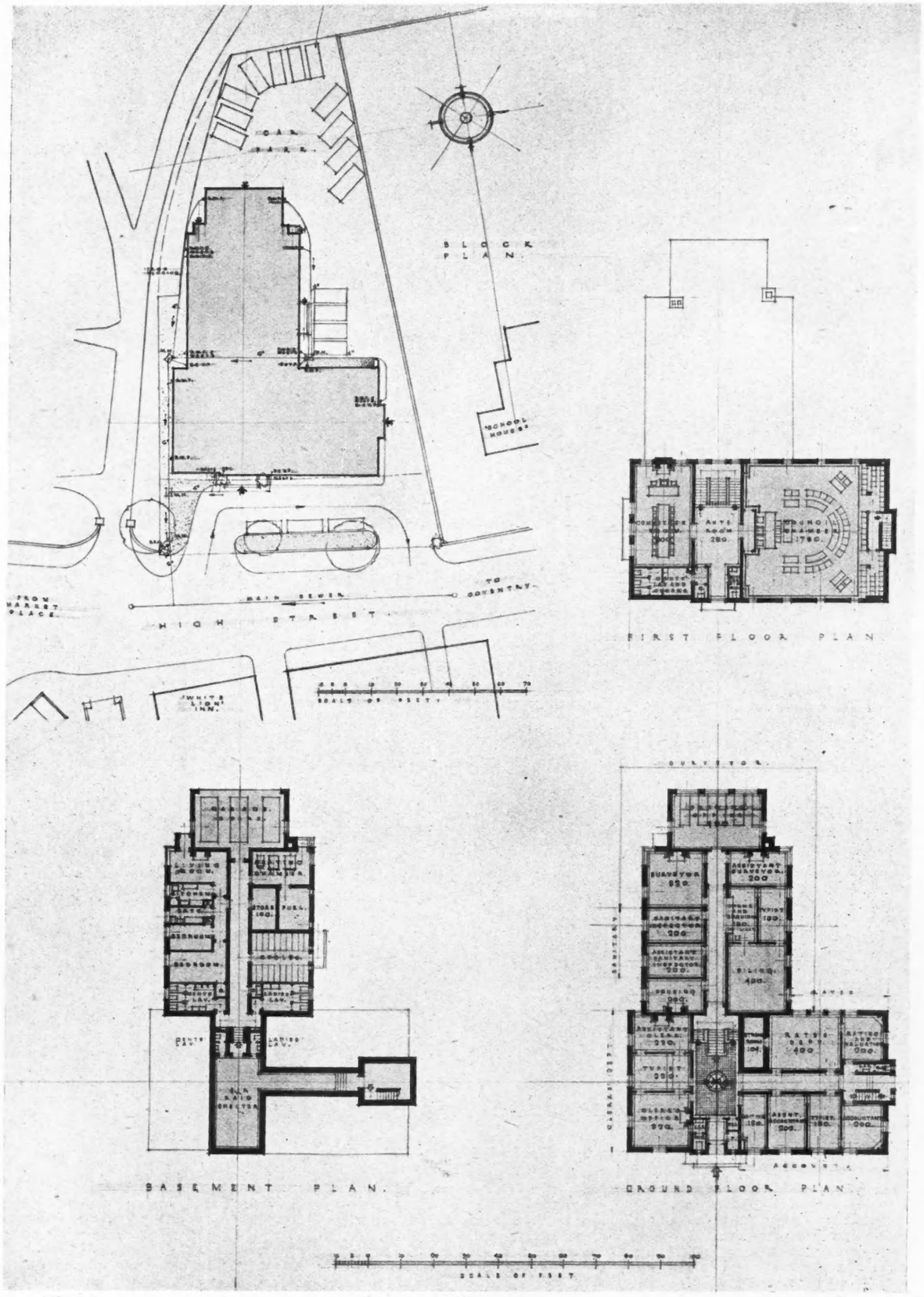
ELEVATIONS AND SECTIONS.

The full award in this competition is given on page 463. Points from the winner's report are: An asymmetrical scheme has been developed to afford the grouping of the various departments to the best advantage and to give the requisite areas as economically as possible. The main entrance fronts on to High-street, while separate entrances are provided for the public attending Council meetings and for ratepayers, etc., when the main entrance is in use for special civic occasions. The internal planning of the partitions is non-structural, allowing for a reasonable amount of redistribution of the offices, though it has been thought that the proper grouping of the departments is of first importance. Council chamber suite is on first floor front.

Elevations are simple and restrained in character. Facing bricks are 2-in. buff-coloured sand-faced bricks with wide cream joints. Stone dressings are cast Portland stone. There would be no steel-framed work. Side walls and corridors of 9-in. brick. Roof over council chamber would be of reinforced concrete and steel beams. Main staircase would be in reconstructed Hopton Wood stone with non-slip treads. Flat roofs would be finished with asphalt or approved patent flat roofing. The total cost, including seating in council chamber, making-up grounds, etc., is estimated at £14,877.

COMPETITION FOR NEW COUNCIL OFFICES, BEDWORTH.

WINNING DESIGN : BY MR. HARRY WEEDON, A.R.I.B.A.



BLOCK PLAN AND FLOOR PLANS.

LIVERPOOL SCHOOL OF ARCHITECTURE SOCIETY

ANNUAL DINNER.

THE annual dinner of the Liverpool School of Architecture Society was held at the Bedford Corner Hotel, London, on Friday, February 24. The dinner was followed by the first general meeting of the Society. Mr. W. Naseby Adams, Dip.Arch., A.R.I.B.A., was in the chair.

The President, PROFESSOR LIONEL BUDDEN, M.A., F.R.I.B.A., describing the recent changes that have been made in the curriculum of the Liverpool School, said the majority of those present at the dinner had received their professional training in the School some time between the years 1918 and 1938, and had therefore taken the five-year course leading either to the degree or to the diploma in architecture. That course, as they would no doubt vividly remember, comprised five sessional examinations, each one consisting of a review of studio work, a *viva voce* and set papers. In the last two years of the course candidates for honours or distinction had the choice of certain alternative options which they exercised according to the degree of their interest in decoration, civic design, æsthetics, advanced construction and quantities. The idea underlying the provision of these alternatives was that students varied in their interests and capacities and that, consequently, they should be permitted to some extent to specialise in their later years in the School.

Up to 1937, in conformity with this policy, the type of thesis prescribed by the regulations governing the work of the final year also offered a range of choice; and although in point of fact most students elected to submit a design thesis, they were actually free to present theses in the fields of either theory or history or of science as applied to architectural construction. In 1938 these latter alternatives were abolished and all candidates were required to present a design thesis adequately developed in working drawings. The preparation of this thesis had come to occupy the greater part of the final year.

Modification of Curriculum.

During the last session the School's Board of Studies, after protracted and careful consideration, decided that further modification should be made in the curriculum. The Board's proposals were approved by the Faculty of Arts, by the Senate and Council of the University and came into effect in October. Briefly, the salient points of the revised curriculum could be summarised as follows :—

One obligatory course had been established throughout the five years. Alternative options had been abolished and the award of honours or distinction had been made dependent on the student's performance in the obligatory course. The five sessional examinations remained, but the final examination had been divided into two parts, Part I being held at the end of the autumn term and Part II at the end of the summer term of the fifth year. The review of studio work in design and construction had been retained as the primary constituent of the first four sessional examinations and of Part II of the final examination, but, whereas under the old scheme the written papers were distributed over all five examinations, they were now grouped at four points in the course—at the end of the first and third years and at the end of the autumn and summer terms of the final year. Thus, the second and fourth sessional examinations were concerned exclusively with studio work in design and construction. In view of the larger intervals between sessional written papers it had been considered necessary to increase the number of terminal tests in the subjects covered by these papers. Finally, the six months' period of office experience which formed an integral element of the five-year course had been moved from the summer term and summer vacation of the fourth year to the summer vacation and autumn term immediately preceding that year. Within the framework of the new curriculum the teaching of architectural history had been considerably amplified by extending existing lecture courses and there had been a similar development in the courses relating to architectural construction, as a result of which lectures were now given and studies made in structural mechanics from the first year onwards.

A Single Obligatory Course.

The speaker went on to explain that the reason for the adoption of the single obligatory course was that the School's Board of Studies was persuaded that the extent of the basic knowledge which the student should endeavour to acquire during five years was such that it was now no longer justifiable to permit specialisation in some directions at the expense of others. A properly balanced course of studies had been arrived at and he believed that the reforms which had been carried out would prove to be sound. As to the grouping of the written papers, this was intended to discourage cramming and to ensure that more use would be made of the long vacations for reading and general study. The principal object in transferring the period of office or "clinical" experience from the end of the fourth to the end of the third year had been to introduce students to the conditions of professional practice at an earlier stage in their career and so to facilitate their ultimate adjustment to those conditions.

During the present session a new regulation affecting the five-year course had been approved by the University. In accordance with the terms of this regulation any student failing twice in any of the first four sessional examinations would not be permitted to continue his or her course except by special permission of the Faculty of Arts. The necessity for such a provision would be appreciated when it was realised that in the examinations held last year forty-six candidates failed and that most of them decided to continue in the School. As the School was full to capacity —at the beginning of the session it had the largest waiting list in its history—it was obvious that unless some such regulation as had been adopted were in force, a situation would speedily be reached in which the 220 available places in the School studios would be entirely occupied by irremovable non-graduates.

A Cosmopolitan School.

The speaker spoke warmly of the high quality of the majority of the students now taking the five-year course and said that the School was retaining its cosmopolitan character and continuing to attract very desirable recruits from the Dominions and other countries overseas. He also paid a tribute to his colleagues, now fourteen in number, who form the staff of the School and who now include a number of architects trained at other schools. In this connection he referred to the peaceful penetration of the staff of the A.A. School by Liverpool-trained teachers—a penetration which he said had reached a degree that was as gratifying as he believed it to be generally unrealised.

In conclusion he expressed the cordial thanks of the Society to the A.A. for co-operating in the arrangement of a joint exhibition of the work of both schools and for providing accommodation for the exhibition.

In connection with the other business of the meeting, Mr. G. F. Ransom, A.R.I.B.A., was elected secretary in place of Mr. P. J. Marshall, A.R.I.B.A., who resigned owing to a new appointment at Coventry.

Among suggestions for future activities was one by Mr. Manthei that the Society should help in organising an exchange of assistants between this country and (say) Switzerland, where Prof. Salvisburg had already proposed an exchange with Liverpool men. Mr. R. Coles, secretary of the Students' Society at the School, enthusiastically supported this idea, and looked forward to close co-operation between the school in Liverpool and the new Society in London.

THE INSTITUTION OF STRUCTURAL ENGINEERS

ANNUAL DINNER AND DANCE.

SIR JOHN ANDERSON, Lord Privy Seal, outlined the Government's policy in regard to protection against high explosive bombs when he spoke on Tuesday, March 7, at the annual dinner and dance of the Institution of Structural Engineers at the Dorchester Hotel, London. Lt.-Colonel H. S. Rogers, C.M.G., D.S.O., President of the Institution, was in the chair.

Sir John, who was proposing the toast of "The Institution," speaking of the policy of his department, said that in the early stages the question of protection against gas attracted considerable attention and occupied a large place in the particular policy of the Home Office, which was then responsible. Having developed protection against gas to a point which made it unlikely that gas would ever be used, attention had been turned to the problem of the incendiary bomb, which had resulted in the establishment of auxiliary fire services in all parts of the country.

Next, they came to the grave problem of protection against high explosive bombs, which was naturally a matter in which the Institution was very closely concerned.

The subject of structural protection was one which touched very closely the lives and interests of the people of this country, and on the achievement of the right solution to this very practical problem Government policy might depend. Those who grumbled at the Government for not giving an immediate and prompt decision, to be followed by action, were hardly doing justice to those who carried the heavy load of responsibility.

The considered view of the Government was that what was immediately necessary was to provide as rapidly as possible on the greatest possible scale for persons exposed to risk protection against splinters, blast, the fall of débris and damage which might be caused by spent material from our own anti-aircraft shells. That was the settled policy, and it was going to be carried out.

It was a policy which had to be carried out by a variety of expedients. The steel shelters formed only part of the solution. We must also rely on such expedients as strutted basements, the provision of communal shelters and to a certain extent on trenches. In this the services and assistance of architects, surveyors and structural engineers were needed, and in carrying out the work they wanted the assistance of constructional engineers and the building trade. Already the fullest collaboration of constructional engineers and the building trades had been promised.

That did not represent necessarily the end of the policy of the Government in regard to structural protection, but it represented a complete and coherent programme which had to be carried out in priority. In connection with the further question of providing more heavily protected shelters—he purposely did not use the term "bomb-proof" shelters, which did not seem to him to be a scientific term—the Government would give a definite decision as soon as that decision could be given with the assurance that it would be the right decision and one capable of being carried into practical effect on the necessary scale.

In the work it had to do the Government wanted the assistance of the Institution; the business of civil defence was in no sense the business of the Government alone. It was the business of everybody—of the Government, of local authorities, of professional and trade organisations down to the ordinary citizen; until that was widely accepted by everyone we should never be prepared to meet the shock of attack.

The PRESIDENT, responding to the toast, referred to the report on structural precautions against air raids that had been issued by the Institution of Structural Engineers. He felt that it was about the most enlightening report dealing with the subject that had ever been put forward anywhere. He wanted to assure

Sir John Anderson that the Institution of Structural Engineers and its members were out to help the Government. They were the very people the Government should look to for help and assistance.

The Rt. Hon. the Earl of Dudley, M.C., President of the Iron and Steel Institute, replying to the toast of "The Guests," submitted by Major A. H. S. Waters, V.C., M.Inst.C.E., M.I.Struct.E., said that Sir John Anderson had tackled a most difficult problem in the most realistic and practical way. It was a task without precedent, and one which had not been made any easier by certain misleading comparisons which had been made between our own problem and that which faced the civil population during the Spanish war.

The company numbered over 600 and included Sir Edwin Airey, Col. P. W. Bliss, Maj. E. C. P. Monson, Prof. H. J. Collins, Prof. J. Husband, and Messrs. S. Ewart Andrews, H. Berry, P. J. Black, J. A. Bowden, R. G. Brown, M. B. Buxton, S. Bylander, H. Colbeck, W. G. Davies, D. Kerr Duff, W. H. Forsdike, D. H. Green, A. R. Ley, F. W. Mackenzie, A. E. Mayhew, E. E. Morgan, R. Travers Morgan, C. W. Reeves, H. A. F. Shepherd, J. M. Sheppard, Digby L. Solomon, A. A. Stewart, C. H. Tarr, A. J. Thomas, T. Wallis, S. D. Wheeler, J. W. Wilcox, P. T. Wilsdon, G. G. Winbourne, and C. Roland Woods.

THE CHARTERED SURVEYORS' INSTITUTION

ANNUAL DINNER.

Sir Charles Bressey, the President, was in the chair at the annual dinner of the Chartered Surveyors' Institution, held at Grosvenor House, Park-lane, W.1, on Tuesday.

The President, who gave the toast of "The Guests," said that at the present time national registration, the marshalling of the man-power and intelligence of the country for the best purposes in the national interest, was occupying a great deal of the time of the Institution. He was one of a Ministry of Labour Committee which was concerned with the registration for national purposes of members of the Institution and allied bodies. It was indicative of the good spirit prevailing in the profession that it had been agreed, for the sake of compression, that the representative of the whole profession on that Committee should be the President for the time being of the Chartered Surveyors' Institution.

An appeal had been made to all members of the Institution to volunteer for any service to which their skill could usefully be applied by the Government. The response had been extraordinary. Already 2,000 replies had been received, and within a few days a complete register would be ready.

A Victorian historian, dealing with the days of Henry VIII., had written: "Through all their arrangements a single aim is visible, that every man in England should have his definite place and definite duty assigned to him and that no human being should be at liberty to lead at his own pleasure an unaccountable existence." Those words might almost be made a motto for national registration to-day. If the Government decided to go further in the matter of registration and in the marshalling of the great array of professional skill and ability, every professional institution in the country would follow its lead.

Surveyors were planners, people who looked ahead. The council of the Institution, like himself, were wholeheartedly in sympathy with the public-spirited efforts which were being made by the Middlesex County Council and others to preserve the Westminster House site as a permanent open space, with the object of enhancing the dignity and beauty of a site which inspired the deepest affection and pride in the heart of every member of the English-speaking race. The council of the Institution had accordingly decided to offer a substantial sum, which might even reach five figures, as a contribution towards the fund required for effecting that indispensable improvement. In addition, a member who desired to remain anonymous, wished to add a supplementary sum. It would be a great blow to the national pride if buildings were again placed on that site.

The days of haphazard and happy-go-lucky planning had passed for good. In the re-planning process surveyors would take their place by the side of statesmen and other national leaders primarily concerned.

Sir Thomas Inskip (Principal Secretary of State for Dominion Affairs), who responded, thanked the Institution for the efforts it was making to organise the experience of its members for national service. Improvisation was very dear to the Englishman, but it would not suit an emergency, or, at any rate such an emergency as might have to be met. Until recently there had been a tendency to suppose that somebody else would carry out the tasks which it would be necessary to perform. People left it to the Government, the Government were inclined to leave it to local authorities, local authorities to individuals, and individuals to each other. He believed that that spirit was passing and that everyone was becoming more and more actuated by the desire to make his contribution to the public service. Whatever dangers might await us we should be equal to meeting them and to carrying out our great work in the world; but it would be a profound mistake to think that we should achieve that result only by equipping ourselves with armaments or making preparations of a material character. The soul of the nation would not survive unless we were conscious of unity in the pursuit of peace. One of the happiest indications of the prospect of peace in the future was that of which we were so conscious in our own country and which was growing even in other European countries—an ardent determination that the world should not have to face the major calamity of war. But if to-day our hearts were lighter and our hopes higher than they had been, let us not for a moment think that we were justified in being less alert and less ready to put ourselves at the disposal of our country.

The Marquess of Reading also replied.

Among others present were:—

Lord Reading, Lord Howe, the Dean of Westminster, Lord Radnor, Sir Edgar Horne, Sir George Courthope, Mr. H. S. Goodhart-Rendel, Mr. Oswald Healing (Senior Vice-President), Sir Leopold Savile, Mr. J. E. Bidwell, Mr. C. H. Bedells, Sir Howard Button, Mr. A. H. B. Talbot-Ponsonby, Lieut.-Col. Acland Troyte, Sir George Chrystal, Mr. Ewart G. Culpin, Sir Walter Lawrence, Sir Ian MacAlister, Messrs. Alan Arnold, C. H. Bailey, T. P. Bennett, A. S. Bennion, G. D. Blake, H. P. Buckingham, C. Chart, Robert Clayton, Cecil Clutton, Robert Cobb, L. A. Culliford, W. R. Davidge, A. W. Davson, F. T. Dear, A. C. Driver, C. E. Elcock, H. H. Ford, T. Peirson Frank, R. S. Gardiner, George Gee, E. B. Glanfield, E. C. Harris, G. R. Holland, H. R. Houchin, Frank Hunt, H. W. Langdon, G. A. Lansdown, C. B. Marshall, John Murray, S. C. Ramsey, J. A. Rosevear, A. Scott, Cyril Sweet, Sydney Tatchell, J. M. Theobald, G. Mackenzie Trench, L. J. Veit, George Widdowson, H. G. Evans (Assistant Secretary), and Major A. H. Killick (Secretary).

Birmingham "Hall-marked" Houses.

Speaking on the scheme of "hall-marked" houses adopted 15 months ago by the Birmingham and District House Builders' Association, Mr. J. H. B. Dixon, president of the Association, said at the recent annual dinner that during the first 12 months approximately 1,200 applications were received for houses to be hall-marked by the Association's registered air brick. More than 400 certificates had been issued. That meant those houses had been passed by the independent surveyor, that the air bricks had been fixed in those houses and were there for the public to see and, above all, that the purchasers were satisfied with the houses they had bought. A number of houses had failed to attain the necessary standard required, and therefore had to forgo the hall-mark sign.

LONDON BUILDING BY-LAWS—LIII

By ALFRED H. BARNES, F.R.I.B.A., and C. ROLAND WOODS, M.B.E., LL.B.

PART IX.—GENERAL (*continued*).

Penalties.

By-law No. 157 provides that any person committing an offence against the by-laws shall be liable on summary conviction to a penalty not exceeding £50 and a daily penalty not exceeding £10, the maximum permitted under Section 5 of the London Building Act (Amendment) Act, 1935.

While on the one hand this by-law lays down the principle that any contravention of the by-laws is an offence and subject to a fine, on the other hand it places a limitation on the amount of such a fine. Even so, this is an outside limit covering all offences under the by-laws, and it may be found that more restrictive limitations for certain corresponding offences are provided in the unrepealed parts of the London Building Act, 1930.

For instance, by-law No. 2 requires every part of a building to be capable of sustaining all the loading thereon without exceeding the stresses provided in the by-laws, and by-law No. 4 specifies a minimum load of 80 lb. per sq. ft. on the floors of retail shops.

Now, in the event of a person converting, by change of user, part of a dwelling-house into a shop, and it happens that the floor, being designed for a dwelling-house, is not capable of safely sustaining a load of 80 lb. per sq. ft., obviously he will have contravened by-laws Nos. 2 and 4, and consequently under by-law No. 157 is liable to a fine not exceeding £50 and £10 a day.

But Section 234 of the Act of 1930 expressly forbids such a conversion (without the consent of the Council) and any transgression of this Section of the Act (which still stands unrepealed) is subject under Section 222 (19) of the Act (which is also still operative) to a fine not exceeding £10 and £10 a day.

This is not, of course, in any sense a contradiction, for whereas by-law No. 157 stipulates a general limitation, the particular limitation in the Section of the Act instanced is lower and therefore "not exceeding" the limit specified in by-law No. 157.

It might be held, on the other hand, that legally two separate offences were involved. Even so, there is little doubt that the court would have regard to the Act of 1930 in fixing the penalty.

Consolidating Effect of the By-laws.

By-law No. 158 enumerates the past enactments, by-laws and regulations which have been repealed under Section 12 (4) of the London Building Act (Amendment) Act, 1935.

Prior to the making of the new by-laws, the requirements relating to the construction of buildings were not confined to the London Building Act, 1930, but were distributed among sundry other documents. It will be observed that the by-laws, besides replacing a number of Sections of the Act of 1930, also replace the remaining by-laws made under Section 16 of the Metropolis Management and Building Acts (Amendment) Act, 1878; those made under the London Council (General Powers) Act, 1890, as well as the London County Council's Reinforced Concrete Regulations.

This has the effect of bringing within the covers of the by-laws the various re-

quirements heretofore contained in several separate documents, the distribution of which has in the past proved a source of inconvenience to the building public. This particular aspect of the by-laws must not be overlooked.

On the other hand, the benefit conferred by this consolidation of the building requirements under the new by-laws is not carried to the extent that might easily have been reached. So much of Part VI of the Act of 1930 as was amended in the by-laws was repealed, whilst the unaltered parts, sometimes consisting of odd parts of a Section and here and there even a fragment of a sentence, have been left unrepealed in the Act, so that the architect, engineer or builder is obliged to refer not only to the by-laws, but to the remains of Part VI of the Act in order to disentangle the legal requirements relative to his work. It is unfortunate that, in making the by-laws, the whole Part was not transposed into the by-laws and all the requirements relating to building enclosed in one pair of covers.*

Appeal.

Section 4 (5) of the London Building Act, 1935, stipulates that where right of appeal already exists, that right must be preserved when making new by-laws.

Section 58 (3) (a) of the London Building Act, 1930, conferred upon the Council powers of modification and waiver over any of the provisions of the Third Schedule to the Act (relating to steel-frame construction) and paragraph (b) of that Section permitted right of appeal to any person dissatisfied with the decision of the Council as to the exercise of such powers in regard to certain specified provisions of the Schedule.

Section 59 (8) of the Act conferred corresponding powers with regard to reinforced concrete construction, and Sub-Section (9) of that Section gave the applicant similar right of appeal in regard to the Council's decision relative to any of the Reinforced Concrete Regulations other than regulations relating to stability.

By-law No. 159 has for its object the preservation of these previously existing rights of appeal in accordance with Section 4 (5) of the Act of 1935, and to this end enumerates those by-laws in respect of which any decision of the Council as to modification or waiver is subject to appeal to the Tribunal of Appeal.

(Concluded.)

[A short series of articles by Messrs. Barnes and Woods on the L.C.C. Timber By-laws will begin in our next issue.—ED.]

The late Washington Wheatley.

It is with deep regret that the directors of the Ragusa Asphalte Paving Co., Ltd., announce the death of their respected colleague, Mr. Washington Wheatley, aged 56 years, who passed away recently at his home, "Buckfast," Wickham-way, Park Langley.

The late W. E. Maddams.

We regret to announce the recent death of Mr. William Edward Maddams, manager of the Government and Railways Department of the General Electric Co., Ltd., which company he joined in 1899. During his 40 years' service he acquired a wealth of electrical experience and a wide circle of friends in the industry, by whom he will be sadly missed. He was 55 years of age.

* The fact that the Building Act Amendment Bill at present before Parliament comprises Sections relating to building requirements and in consequence repeals the debris in the Act of 1930, has the effect of perpetuating the difficulty by merely transferring the matter from one Act to another.

MORTAR FOR BRICKWORK

NOTES FROM THE INFORMATION BUREAU OF THE BUILDING RESEARCH STATION.*

THREE years ago a note was published in this series on Mortars for Brickwork. In spite of its wide circulation in the technical Press, numerous inquiries on the subject continue to be received, and to meet this continuing demand the present rather more comprehensive note has been prepared.

There are prevalent misconceptions of the functions of mortar in brickwork. A common idea is that mortar is used to bind bricks firmly together, and it is therefore often concluded that the mortar having the highest tensile strength is the best. This view is fallacious for two reasons :—

(i) Brickwork is not normally subjected to any tensile stress. In designing a tall factory chimney no account is taken of the possible development of tensile strength on the windward side : the work is designed to obtain its stability by the action of gravity and to resist compressive stress only, as all brickwork should be. A system has recently been developed in Austria in which bricks or blocks are simply laid on strips of slightly resilient padding, there being no tensile strength in the joints whatever.

(ii) The mortars which exhibit the highest tensile strength are not necessarily those which adhere most strongly to all types of bricks. A high tensile strength in the mortar is valueless unless there is good adhesion to the bricks on each side,

The true functions of mortar are to provide a means of building up from single units a mass of brickwork capable of withstanding a certain degree of compressive stress and exhibiting a reasonable resistance to the penetration of rain. To these requirements must be added that of durability. The characteristics of brickwork mortar are dictated by these requirements.

For providing resistance to the penetration of rain, preference is often given to the densest types of mortar. This is a mistake. Experience shows that penetration of rain almost always occurs, not through the bricks or through the mortar, but through imperceptible hair cracks between the mortar and the bricks. Other channels through which penetration often occurs are poorly filled vertical joints (at right angles to the wall face) and headers in 9-in. work when very porous bricks are used. The mortars which are in themselves very dense and impervious do not necessarily adhere best to all types of bricks. It follows that though a high tensile strength in mortar is not essential, a high degree of adhesion between brick and mortar is highly desirable. The ruling consideration in this connection is not strength but weather-proofness.

Characteristics Desirable in Mortar.

A good mortar for brickwork is one which :—

(*a*) Is easily workable, standing up well on the trowel but spreading easily out on bricks; good workability and plasticity are required to enable vertical joints to be thoroughly filled.

(*b*) Stiffens up quickly as the bricks are laid, enabling work to proceed without delay.

(*c*) Adheres strongly to the bricks.

(*d*) Develops a sufficient compressive strength in the masonry.

Evidently since the properties of the bricks are involved in (*b*), (*c*) and (*d*) above, the same mortar will not be equally suitable for all kinds of bricks, but a composition must be selected which will suit the particular bricks used. Where high strength is not necessary, the choice will fall on a mortar of the highest possible degree of workability; but where strength is important it may be necessary to use a strong mortar, say, plain cement mortar, at some sacrifice of ease in laying. Where engineering bricks are used a strong mortar must be used, say, 1 part of cement to 2½ parts of clean, well-graded sand, for the use of a weak mortar will obviously defeat the object of using engineering bricks, which is to carry high loads. The use of a highly plastic white lime mortar might be inconvenient with an engineering brick, or with any unit which had negligible absorption, such as glass blocks, for the first stage in the hardening of such mortar depends on abstraction of water by the unit, and so the work might be delayed. On the other hand, a plain cement mortar is very difficult to use with highly absorptive units, even if they are wetted first, for the water in the mortar may be abstracted so rapidly that the film of cement in contact with the unit never sets properly and a channel is formed for penetration of rain. Mortars made from lime, or containing a high proportion of lime, are better in such cases, for they lose water less readily and so help to ensure good adhesion.

A general principle of wide application which will usually lead to a wise choice of mortar, is that mortar should be compounded so that its strength is similar to, but somewhat less than, that of the unit it binds.

Materials for Mortar.

The quantity of mortar used in a brick building is so great that considerations of transport cost will usually dictate the choice of materials, and local types will be used. This will involve the advantage that the mortar materials will be thoroughly familiar to the operatives, who will be able to use them skilfully and to the greatest advantage. The danger of importing materials from a distance is that the architect or builder is never sure that the local operatives understand how to handle them. Fortunately, a variety of combinations can be used to produce mortars not essentially different.

Portland Cement.

The quality of the various brands does not differ significantly as regards mortar making. Where a particularly white joint is required, white Portland cement should be used.

The setting process with Portland cement starts as soon as water is added, whether the mortar is used alone or mixed with lime. Any mortar in which cement is used should therefore be used up within about four hours, or the value of the cement will be reduced.

Limes.

The limes used in building work show a continuous gradation in properties between the pure, white (high calcium limes) and the eminently hydraulic ("lias limes"), but it is convenient to divide them into three main groups, viz. :—

(*a*) High calcium lime.
(*b*) Semi-hydraulic lime.
(*c*) Eminently hydraulic lime.

The limes may be sold either unslaked, or as dry-hydrates slaked to a dry powder at the works. In the latter case the manufacturers should be asked to give a guarantee of soundness.

A parallel series of limes exists which contain magnesia and are called magnesian limes, but there are few magnesian limes sold in this country which correspond with classes (*b*) and (*c*) above.

"White Lime" (more correctly defined as "High Calcium Lime").

This is available in two forms :—

(*a*) Lump lime, which is slaked to putty on the job. Slaking presents few special difficulties.

(*b*) Hydrated lime, *i.e.*, in the form of a dry powder, prepared in the lime works. This needs no slaking on the job, but some builders prefer to make it up into mortar or putty and leave it for a few days before use.

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These limes possess no hydraulic setting power. Any large mass of putty or mortar in a heap or pit will gradually improve in workability, but will not harden. The mortar immediately stiffens when it dries or when moisture is abstracted from it by contact with a brick. True, hardening is very slow. A proportion of cement is commonly added when building with these limes to-day. This enables the work to be carried up more quickly. A high degree of workability is a general characteristic of the white limes when slaked to putty. The dry hydrates are also reasonably plastic. The combination of the plasticity of the lime with the hydraulicity of Portland cement yields a mortar of excellent characteristics.

"Grey Limes" (more correctly defined as Semi-hydraulic Limes).

These limes, of which grey-stone lime is an example, occupy a position intermediate between the high calcium and the eminently hydraulic limes. When slaked to putty they approach the high calcium limes in plasticity, though some interference with their hydraulic properties is almost certain. If a strong mortar is required it is then advisable to gauge with cement.

When dry-hydrated in the limeworks this difficulty of the destruction of hydraulic power in slaking is overcome. These dry hydrates can be used with confidence to yield a mortar of fair workability and moderate strength. In very cold weather or when increased strength is desired a gauging of cement should be used. A similar effect to dry hydration can be produced by slaking in a pile covered with sand.

Eminently Hydraulic ("Lias") Limes.

Eminently hydraulic limes resemble Portland cement in composition, but are burnt at a lower temperature. They contain free lime, but not enough to slake readily with evolution of heat. They differ from limes of the previous class in attaining their strength much sooner, and in not being usually so plastic or workable. These limes may be slaked on the job or purchased as dry hydrates. In the former case they are usually slaked with a minimum of water and in such a manner as to conserve heat, *e.g.*, in a pile covered with sand. To facilitate slaking they are often sold in powder form, but should then be carefully distinguished from the dry-hydrated limes in this class. The latter only require to be *mixed* with sand and brought to a plastic condition with water. They are then immediately ready for use. Hydraulic lime, suitably slaked, is an ideal mortar for many classes of bricks, since it combines good workability with a moderate strength. (See under Sands, below.) Hydraulic lime should not be gauged with cement as a general rule.

Magnesian Limes.

British magnesian limes in general resemble in their characteristics the white limes already discussed, though there are one or two of them which contain hydraulic constituents. It is generally considered that the magnesium oxide they contain aids the hardening of the lime so that, after a period, a magnesian lime mortar will be harder than the corresponding high calcium lime mortar. Magnesium oxide does not hydrate as readily as calcium oxide, and for this reason precautions are taken in slaking to conserve heat, very like those applied with hydraulic limes. This is to obviate risk of unsoundness.

A summary of the characteristics of limes from the point of view of their use in mortar for brickwork is given in Table 1.

Choice of Mortar Composition for various Classes of Bricks.

It has been pointed out that mortars should be compounded to suit the characteristics of the bricks used. This adjustment cannot be by any means precise, and quite a wide range of compositions will be suitable in many instances. The following suggestions should be regarded as indicative merely and not as precise recommendations.

Bricks can be divided according to their strength into three classes which roughly conform with the grading according to absorption. The composition of suitable mortars is shown in Table 2.

Stronger or weaker mortars can be used with each of the first two classes, and the corresponding approved loadings are given in the Model By-Laws.

Methods of Preparation.

Mortars containing lime and cement may be made from the dry-hydrated limes simply by mixing in the required proportions and then adding water, but it is often convenient and more economical to base the mortar on limesand coarse stuff. The lime in this will usually have been wet-slaked and have developed its maximum plasticity. A (roughly) 1 : 3 : 12 mix will be obtained by merely adding one part of cement to 10 or 12 of coarse stuff. If a stronger mortar is desired, say 1 : 1 : 6, it will not be enough to add cement alone, for assuming the coarse stuff is 1 : 3, the addition of one part of cement to three parts of coarse stuff will give a 1 : 1 : 3 mix, which will be far too rich and very uneconomical. To correct the ratios three volumes of sand must be added also.

TABLE 1.

Characteristics of Lime and Cement affecting their Use in Mortar for Brickwork.

	(1) High calcium (stone lime, white chalk lime).	(2) Semi-hydraulic (grey-stone lime).	(3) Eminently hydraulic ("lias lime").	(4) Portland cement (white or grey).
Plasticity	Very high	Good	Fair to poor	Less than (1) or (2).
Hydraulic strength	Nil. Stiffens on abstraction of water, and then hardens very slowly and gradually by absorption of carbon dioxide from the air.	Setting takes up to three weeks. Low early strength. Moderate final strength.	Setting takes place in a few days. Moderate final strength.	Higher hydraulic strength than any lime. Strength is attained earlier and final strength is far higher.
Permeability (of mortar).	High	High	Moderate	Very low.
Suitability for gauging with cement.	Highly suitable	Suitable	Usually unnecessary, often undesirable.	—
Method of slaking	Run to putty	Run to putty or slake in pile if hydraulic strength required.	Slake in pile	—
Period of storage ...	As long as possible	Brief period one-two days if to be used alone. If slaked longer, gauge with cement.	Varies according to type. Not more than one-two days or hydraulic strength will be impaired.	Must be used up within a few hours after mixing. Prepared mortar becomes more workable up to four-six hours' storage, but strength will be "killed" if kept longer.

TABLE 2.

Crushing strength of brick in lb. per sq. in.	Composition of mortar (parts by volume).	Maximum permissible pressure (uniformly distributed) in tons per sq. ft. of overall area of wall or pier according to Model By-Laws.
1,500–3,000 (Examples: — Flettons, gaults, ordinary stocks, Class A sand-lime bricks).	1 cement 3 lime 12 sand or 1 hydraulic lime 2½ sand	5.5
3,000–5,000 (Examples:—Some flettons, hard stocks, some red wire cuts, many "special purposes" sand-lime bricks).	1 cement 1 lime 6 sand	10
Over 5,000 (Examples:—All clay engineering bricks).	1 cement 3 sand	16

Effect of Mortar Composition on Strength of Brickwork.

The strength of brickwork, built with bricks of intermediate strength, is not so much influenced by the strength of the mortar as is often supposed. A mortar containing quite a high proportion of lime may give results hardly inferior to those with cement. As strength is often not the prime consideration, and in view of the importance from the point of view of weatherproofness of having well-filled joints and good adhesion, the advantages of the "gauged" or "compo" mortars will be apparent. The effects of mortar composition on the strength of brickwork have been most thoroughly studied in the case of fletton bricks (crushing strength 2,500-3,000 lb. per sq. in.). A series of results obtained is represented diagrammatically in Figure 1.

Sands.

The foregoing discussion has been confined to the cementitious constituents of mortar, but some reference must be made to the characteristics of sand. Fortunately, the requirements for sand for brickwork mortar are not stringent, the position being far different in the case of sand for concrete; nevertheless there are several points deserving attention.

(1) Well-graded sand (by which is meant one containing proportions of all grain sizes) will yield a workable mortar with less lime and cement than sand which consists of grains which are all of one size. Fine sands of uniform grain size should be avoided if possible.

(2) Sands must be chosen with care when using hydraulic lime. Very fine sands will yield a joint which can be rubbed away, unless a rich mix is used. Loam interferes with the set of hydraulic lime and cement, and this may be serious in the case of the lime owing to its relatively feeble hardening properties. Sand for hydraulic lime should be clean and well-graded. A mix of 1 : 2½ or 1 : 3 will be suitable.

(3) The presence of a *small* proportion of loam (2-5 per cent.) need not be objected to in cement or compo mortars. The loam or clayey material will act rather like lime, making the mortar more workable. An excess of loam or clay may be objectionable as it will increase the liability to shrinkage. If the sand is heavily loaded with clay and silt, it will be advisable to reduce the lime in the mix to compensate for it. The reason is as follows. Suppose that a 1 : 1 : 6 mix is required. If a sand is used containing 10 per cent. of the loam the true proportions are :—

1 part cement.
1 part lime.
$\frac{6}{10}$ part loam or clay.
$5\frac{4}{10}$ part sand.

Assuming the clay to be in some respects equivalent to the lime, the mix is roughly 1 : 2, which is rather too rich in fine material. Also the ratio of lime and clay to cement is 1.6 to 1, not 1 to 1 as was desired, and the mortar will, therefore, be much weaker than was intended. Experienced craftsmen instinctively make adjustments to meet difficulties of this sort, and this doubtless accounts for the many examples of good work performed with most unpromising materials. Where the element of skill is lacking, the most rigid specification cannot prevent trouble.

Import Duties Advisory Committee.

The Import Duties Advisory Committee give notice of an application for an increase in the import duty on wooden fittings not exceeding 1⅛ in. in thickness, of a description commonly used as electrical or gas fittings and of a diameter not exceeding 5 in. when round, or of a length not exceeding 7 in. when rectangular. Any representations in regard to this application should be addressed in writing to the Secretary, Shell-Mex House, W.C.2, before March 23.

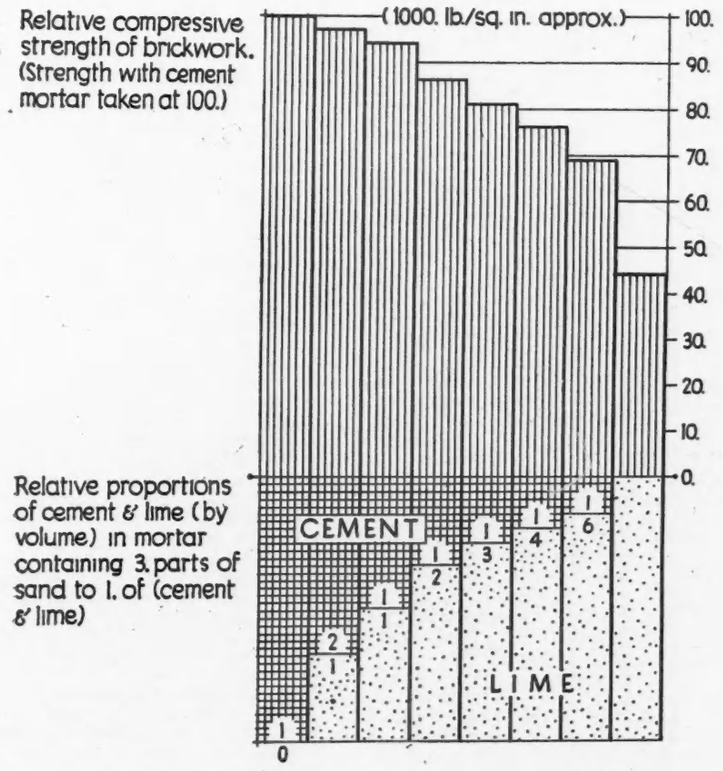

FIGURE 1. Effect of mortar composition upon the strength of fletton brickwork. (Compressive strength of bricks 2685 lb. per sq. in.)

IN PARLIAMENT

War-Time Plans.

Full details of the Government's emergency war-time plans have been given in the House of Commons by the various Ministers concerned. SIR JOHN ANDERSON, the Lord Privy Seal, explained that part of his protection policy consisted in the strengthening of basements of houses. Plans had been worked out after very careful research, and experiments were made at Winchester recently from which the strutted basements which were subjected to tests emerged in a manner which gave the fullest satisfaction to his technical advisers. They contemplated at once organising the available resources of architects, surveyors, engineers, and so on, to get ahead, in agreement with local authorities, with a survey of basement accommodation all over the country. As the next stage they intended to make arrangements, with the co-operation of the engineering contractors and the building trades, for the carrying out of the necessary work.

MR. WALTER ELLIOT, the Minister of Health, said: "In the event of an emergency one of the most urgent tasks would be to repair with the utmost speed any war damage to essential buildings. Included in this category are houses and other buildings used for housing the population. A plan has been prepared for this purpose, and its final details are now being worked out. It aims at securing that damaged housing accommodation which is occupied and still must be occupied will be immediately rendered reasonably habitable by repairs of a temporary nature, and that subsequently, when time is available, repairs of a more permanent character will be carried out. It is contemplated that the work will be carried out under the control of the housing authority, using as their agents such building staff as they possess themselves, together with locally organised units of the building industry. The Government, through the Lord Privy Seal, are in touch with the building industry, both labour and employers, who have indicated their willingness to render public service to the full extent of their capacity.

"To assist local authorities in the task, there will be housing representatives of the department in each of the local regional offices of the Ministry, while others at headquarters will be available to strengthen the representatives in any hard-pressed region.

"In view of the present activity in the building industry it seems unlikely that there would be demands on ordinary building materials which could not be met, but it may be different with the kind of materials (like roofing felt or corrugated iron) required for temporary emergency repairs. The available supply of such materials is now being examined in the light of possible demands, which, of course, must take into account likely demands for the repair of other essential buildings such as hospitals, docks, etc. If a shortage is disclosed, the Government will take the necessary steps to see that it is made good at the earliest possible moment."

Steel Shelters.

MR. WILSON asked the Lord Privy Seal whether he could state, in the case of a steel shelter for the two-storeyed terraced house or cottage type of modern house, the number of sections for each unit; the space occupied before erection; and how the sections were fastened together.

SIR J. ANDERSON said that the steel shelter which was being provided for houses of this type consisted of 14 sheets of corrugated steel, six steel bars, and a bag containing the accessory parts—bolts, nuts, etc. The various sections could be packed, before erection, into a space approximately 7 ft. by 3 ft. by 3 ft. The sections were fastened together by means of bolts and nuts. The manufacturers estimated that a shelter could be erected by two persons of average competence in about 15 minutes. The time taken for digging the hole and covering the shelter depended upon the nature of the soil.

THE CONTRACTOR'S OBLIGATIONS AND LIABILITIES—XXII

By W. T. CRESWELL, K.C., Hon.A.R.I.B.A., A.S.I., etc., assisted by NORMAN P. GREIG, B.A., Barrister-at-Law.

CERTIFICATES—(*continued*).

THE case of Rogers *v.* James (1891), 8 T.L.R. 67, previously referred to, in which in an action by an architect for his fees under a building contract the employer succeeded in a counterclaim for damages for negligence, was distinguished in the case of Chambers *v.* Goldthorpe (1901), 1 Q.B. 624, C.A. Here the facts were as follows: A building owner employed an architect, for reward, to supervise the erection of certain houses by a contractor. It was provided by the building contract that payments on account of the price of the works during their progress, and for payment of the balance after their completion, should be made upon certificates of the architect, and that a certificate of the architect, showing the final balance due or payable to the contractor, should be conclusive evidence of the works having been duly completed, and that the contractor was entitled to receive payment of the final balance. The defendant admitted the claim in respect to the architect's fees, but counterclaimed against the architect for negligence in measuring up the work done by the contractor, and permitting the contractor to include in his accounts sums to which he was not entitled, and certifying such accounts, whereby the defendant (the employer) suffered loss. The contract contained an arbitration clause which, among other things, provided that disputes or differences between the employer or the architect on his behalf, and the contractor, including the contractor's dissatisfaction with any certificate of the architect, should be referred to the arbitration and final decision of an architect appointed in the manner provided.

The County Court Judge gave judgment for the plaintiff on the claim and for the defendant on the counterclaim, the damages to be assessed by arbitration. On appeal, the Court allowed the appeal on the ground that as the plaintiff was placed in the position of an arbitrator, he was not liable in an action for negligence in respect of the manner in which he had exercised his function as arbitrator. (There was, of course, no question of fraud or collusion involved in the case.) The present case was an appeal from this last judgment, and it was held that the architect, in ascertaining the amount due to the contractor and certifying for the same under the contract, occupied the position of an arbitrator, and therefore was not liable to an action by the building owner for negligence in the exercise of those functions.

Before referring to the particular judgments in this case it should be made perfectly clear that an arbitrator is not liable for want of skill or care in the performance of his duties, for it follows that, since he is chosen by the parties who are presumed to know his capabilities, the blame rests with them if he fails to discharge his duties satisfactorily. The matter was put in this way in Pappa *v.* Rose, L.R. 7 C.P. 32, 525: "A person who is appointed and is acting as an arbitrator to determine a matter in difference between two or more persons does not enter into an implied promise to bring to the performance of the duty entrusted to him a due and reasonable amount of skill and knowledge."

In the Chambers *v.* Goldthorpe case above referred to, Smith, M.R., in his judgment stated that though a person who undertakes to give a decision between two parties (as in a building dispute) may not be an arbitrator in the strict sense of the term; nevertheless he is not liable for want of skill, and he held that for that reason the architect, in this case, was not liable to an action for negligence. He continued: "I wish to add a few words with regard to the case of Rogers *v.* James, in which an architect was held liable for negligence in an action by his employer. I think that case is clearly distinguishable from the present. There the architect was sued for negligence in not properly supervising the work under a building contract, which he was employed to supervise by the building owner. *No question appears to have been raised in that case as to the position of the architect being that of an arbitrator. It was simply a case in which he was held liable for negligence in the performance of a duty which he owed to his employer and to him alone in respect of a matter in which he was acting solely as agent for the building owner.*"

Collins, L.J., was of the same opinion, and he added: "No one disputes that for many purposes the architect is the agent of the building owner, and would therefore be liable to an action for negligence, but it is not inconsistent with that proposition that for some purposes he should assume the rôle of a *quasi*-arbitrator, in which case an action will not lie against him for negligence. In Rogers *v.* James the architect was apparently not acting in that capacity, but as agent for his employer."

It is submitted, therefore, that the responsibility of an architect or engineer towards the employer is a dual one, and that an action for negligence will always lie, at the instance of an employer, where the architect or engineer has failed to use the ordinary skill and care to be associated with his profession. But the effect of Chambers *v.* Goldthorpe appears to be that where an architect or engineer is placed by the terms of a building or engineering contract in the position of having to give certificates which are to be conclusive as to the matters covered by them (*e.g.*, completion of the contract works, etc.), then the architect or engineer is not acting as the paid servant of the employer, or, indeed, as agent of the employer, but is in the position of an arbitrator who must judge according to his own conscience, and is not, as arbitrator, liable to an action for negligence in giving his decision.

Though it may be considered that the cases of Rogers *v.* James and Chambers *v.* Goldthorpe are, on the face of them, of more importance as showing the relation of employer and architect in regard to certification, their effects ought not to be overlooked by the contractor. We would again point out that where, under a building or engineering contract, the architect or engineer is made the certifier, his decision cannot be impugned by the contractor unless there has been fraud or collusion between the employer and the architect or engineer. In Goodyear *v.* Weymouth Corporation (1865), 35 L.J. C.P. 12, where an architect's decision under a building contract as to the nature, quality and quantity of the work was to be final and conclusive, it was held that the architect's final certificate of satisfactory conclusion of the contract works virtually released the contractor from liability for defects, in the absence of fraud or collusion. As Erle, C.J., put it: "If his conduct was fraudulent, his determination would be void."

(*To be continued.*)

BUILDINGS ILLUSTRATED

Clothing Works, Worsley.

Burtonville Clothing Works, illustrated on page 478, were erected by direct labour. Subcontractors and suppliers were: Structural steelwork, Dorman, Long; electrically operated glass roofing, lantern lights, Hope's; glazed terra-cotta and faience, Middleton Fireclay Co.; cooking apparatus, Benham and Sons, Ltd.; "Vulcan" anti-fire equipment, Atlas Sprinkler Co., Ltd.; boiler flue cleaner equipment, Boiler Tube and Flue Cleaner; joinery, D. Barker and Sons, Ltd., and C. W. Norris, Ltd.; main switchboard and motors for air-conditioning plant, Crompton, Parkinson, Ltd.; electric shutters, G. Brady and Co., Ltd.; "Thermofeed" relay pump control, Ronald Trist and Co., Ltd.; wrought ironwork, Brookes and Co. (1925), Ltd.; maple flooring, Bridge Mahogany and Timber Co., Ltd.; lamps, distribution boards, switchgear, cables, etc., G.E.C.; cement, Earle's; steel concrete flooring, Francois Cementation Co., Ltd; factory chimney and lightning conductors, P. C. Richardson and Co. (Middlesbrough), Ltd.; hydraulic jacks, Epco, Ltd.; composite roofing and rock asphalt, Northern Asphalte Co., Ltd.; terrazzo flooring, A. Quiligotti and Co.; "Glassteel," Benjamin Electric, Ltd.; air-conditioning, Lipscombe Air Conditioning Co.; asbestos cement, Turners Asbestos Cement Co.; c.i. rain water and soil goods, Sloan and Davidson, Ltd.; sanitary fittings, Leeds Fireclay Co., Ltd.; "Nori" bricks, Accrington Brick and Tile Co.; gloss paint, Docker Bros.; wood block floors, Albert Riley and Son; locks and door furniture, Joseph Kaye and Sons, Ltd.; architectural metalwork, R. Pearson (Birmingham), Ltd.; pipe barrier rails, A. E. Naylor and Son; and mechanical stokers and coal-handling plant, John Thompson, Ltd.

INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

We do not undertake to reply to inquiries concerning proprietary materials.—ED.

QUESTION.

Chimney-stack Problem; Discoloration of Ceiling.

SIR,—The chimney-stack of my domestic boiler is giving a lot of trouble by discolouring badly the ceiling and wall of my kitchen and of the bathroom above. This discoloration has also shown itself quite prominently on the outside of the stack wherever a hair-crack exists in the covering coat of rough-cast, and most of all at the point where it emerges from the side wall of the house from the soot-door downwards. The trouble is in evidence only during the winter months. After a period of rain the inside of the stack, as seen from the soot-door, is wet with a kind of oily-tar liquid. Recently I have been told that an anthracite coal used in a boiler gives off fumes which, in contact with excessive moisture, produce this oily tar. No fault is noticeable at the roof flushing; the chimney is on the sheltered side of the house; my lounge-fire chimney on the other side is "clean," and the house is not yet three years old. A year ago a cement slab was placed above the chimney-pot to keep out the rain, but this had no effect. I wonder if anyone has experienced similar trouble or can make any suggestion which would solve the problem?

P. J. M.

ANSWER.

Scaffolding for Buildings of Present-day Design.

[ANSWER TO "L. E. W.," MARCH 3.]

SIR,—In a catalogue I compiled six years ago is a preface as follows:

"To take the case where so much is included per rod of reduced brickwork. It is obvious that the cost of scaffolding 272 ft. super of 14 in. work is not the same as 408 ft. super of 9 in. work. It is therefore evident that the practice of including in the roddage price a fixed sum is not correct. This method of pricing has acquired usage from the days when 22 in. walls were reduced progressively to 9 in. in top storey.

"In these days of steel-framed buildings the only safe method is to price out a separate item for scaffolding, adding on for incidentals, such as hoist towers, etc.; the brickwork then can be dealt with separately, and as the scaffolding performs its function in regard to pointing, fixing windows, cells, string-courses, and the various embellishments these can all be priced on their individual merits."

I do think, therefore, that the points raised by querist are extremely important, and quantity surveyors could either give the super area or in the case of birdcage internal scaffolds cubic contents or, alternatively, a p.c. sum for scaffolding.

WALTER F. CLARKE, A.M.I.Struct.E.

[A number of inquiries and answers have unavoidably been held over.—ED.]

INCORPORATED CLERKS OF WORKS ASSOCIATION

ANNUAL DINNER.

THE sum of £108 was raised in aid of the Benevolent Fund of the Incorporated Clerks of Works Association of Great Britain at the 56th annual dinner of the Association held on Saturday, March 4, at the Café Royal, Regent-street, W.1, Mr. Lionel G. Pearson, F.R.I.B.A., presided.

MR. W. J. GIBBINS, V-P.I.C.W.A., proposing the toast of "The Architects and Surveyors," mentioned the difficulties of an architect's work and added that those worries were infinitesimal compared with those borne by the clerk of works. Nevertheless, the speaker felt that the co-operation and assistance given by the clerk of works did help to lighten the burden of the architect. The fact that their efforts were appreciated was shown in the manner in which the architects and surveyors were ever ready to help the Association, particularly the Benevolent Fund.

Responding, MR. T. P. BENNETT, F.R.I.B.A., said that architecture to-day was much too big a job for any one man's brain, and since nobody could possibly cover the knowledge they were supposed to have they had to rely on a group of people composed of assistants, builders, foremen and clerks of works. "I pay no empty tribute to the clerk of works when I say that to-day, more than ever before, he is a necessity to the architect and builder. The days are gone when the clerk of works was a mere policeman on the job. . . . His is one of the most difficult tasks anyone can possess, and in a profession like building it has to be coupled with a really extensive technical knowledge."

MR. A. HARRIS, D.S.O., F.S.I., also responding, said: "We quantity surveyors known only too well that, as Mr. Bennett has said, the function of the clerk of works is not simply that of an inspector on the works but that of one who in many ways is to-day one of the most important in getting a building finally completed. His general knowledge and his tact are of enormous service to the quantity surveyor, particularly when he arrives at the final settlement of accounts.

When the Job is Finished.

"The clerk of works has one thing in common, I think, with everybody engaged in the building industry, and that is his doubt as to what will happen when the job on which he is engaged comes to a finish. I suppose that is something which has worried every architect, quantity surveyor, foreman and clerk of works engaged in the building industry, and I can only express the hope that the heads of the great professional institutions, the Government departments concerned, and the building organisations of employers and men may continue to collaborate with the idea of levelling out the bumps and waves of depression which from time to time seriously affect us."

Submitting the toast of "The Incorporated Clerks of Works Association," the CHAIRMAN said he felt very strongly that the important thing was that they were all part of the build ing trade and that they could not all go on in watertight compartments. The speaker went on to say that sound construction was the basis of good architecture, and they looked to the clerks of works to carry on the tradition of good, sound, English construction, for they had the finest materials and the finest workmen in the world in England. At the present time we were standing at the cross-roads of functional architecture; it had done a lot of good, but it had left architecture in a state of weakness, and the speaker felt that it was in need of a restorative. By falling back on good old English materials and traditions they would get back to a finer architecture. In connection with A.R.P. the speaker made a plea for more open spaces. At the present time the whole place was a tangle of buildings and sewers; the first thing to have when starting to dig for A.R.P. purposes was some clear ground, and he hoped that the experts would go on arguing until they were black in the face emphasising the need for open spaces.

Continuing: "There are two spectres which haunt the working people of this country. One is unemployment and the other is old age. The old-age pensions are not enough and we have not yet solved the unemployment problem. Until we have got rid of these spectres we have got to get something to fill the gap, and I hope that you will do your best to help fill that gap to-night."

MR. W. E. BREWSTER, President of the Incorporated Clerks of Works Association, in response, said the chief aim of the Association was to see that all members were men of integrity and achievement and qualified to undertake any work that they might be called upon to do. Should any member of the architectural, surveying or building professions require their service they had in their secretary, Mr. Allison, an able man, who was willing to render service and attention to all inquiries. The speaker could not allow the occasion to pass without thanking Mr. Louis Jacob, Mr. L. H. Bucknell, and Mr. G. S. White, all Fellows of the Royal Institute of British Architects, for their valuable aid and support in connection with the Association's Examination Board.

MR. G. W. HARRIS, Editor of the I.C.W.A. Journal, in toasting "The Worshipful Company of Carpenters," thanked the company for allowing the Association to use the Carpenters' Hall, particularly for the examinations. In the old days clerks of works were closely allied to the carpenters as craftsmen, for he believed the majority of clerks of works were recruited from carpenters and joiners; but that, of course, was now being gradually altered, by reason of the different methods of modern construction, which, he much regretted, had lessened the work of the carpenter.

In reply, MR. LOUIS JACOB, F.R.I.B.A., F.S.I., said that as a past-master of the Carpenters' Company, he would like to say that Company was pleased to do what it could to help the Association by lending its hall for meetings and examinations. The Company was also concerned with the promotion and encouragement of really good craftsmanship. He was sorry to say of the many candidates who came before them for examination so few knew anything about the best way of doing things; all they knew anything about was the speculative building class of work, which was a great pity.

A New Toast.

MR. P. J. LUXTON, P-P.I.C.W.A., submitted the toast of "The L.C.C. Town Planning," and said it was a new toast on their list, but when it was remembered that the L.C.C. expended over 30 millions a year they would agree that it was worth toasting. They were proud of the fact that the clerks of works employed on the County Hall and on the recent extension to the building were members of their Association.

MR. H. BERRY, A.I.Struct.E., Chairman of the Town Planning Committee of the L.C.C., responding, said the job of town planning London was not a light one, for it started 300 years too late. Rights of old foundations were a nuisance in Wren's time and they still were to-day. Had Wren's plan for London been adopted there would be no need to re-plan it now; and as the job had started 300 years late it must needs be slower than it would be had they virgin soil on which to work. In carrying out the work they had tried to invoke the aid of all those who had anything to contribute to the common stock of knowledge. The days had gone by when the L.C.C. would stand on its own as though it were the repository of the knowledge of all the ages.

MR. W. C. HACKING, P-P.I.C.W.A., and MR. A. B. ASHBY, P-P.I.C.W.A., proposed the toasts of "The Builders" and "The Visitors" respectively, and MR. DOUGLAS GREEN, O.B.E., M.C., A.M.I.C.E., responding, said that in these days the job of the clerk of works was very complicated, so much so, in fact, that people marvelled to know how he ever managed to get through it all.

MR. BREWSTER proposed the toast of "The Chairman," and MR. PEARSON briefly replied.

The company included Messrs. E. R. Babbs, A. Strachan Bennion, L. H. Bucknell, W. Lake, Cecil Masey, H. G. Montgomery, and J. W. S. Stephens.

NEW BUILDINGS IN LONDON

The Editor welcomes authentic information for this feature from architects, surveyors or contractors. Where business representatives cannot be seen personally at this stage, this should be mentioned. Items should reach 4, Catherine-street, Aldwych, W.C.2, no later than Wednesday morning.

ACTON.—EXTENSIONS.—Are to be made in Packington-road, for the Zion House Laundry (Acton), Packington-road, W.3. The architects are Messrs. Percy Pratt and Blount, 174, High-road, Acton, W.3. No contracts placed.

BANSTEAD. — HOUSES. — Messrs. A. E. Jones (Woking), Ltd., 95, Chertsey-road, Woking, are erecting 38 houses and flats in Buckland-road, Kingswood, for the U.D.C. The plans are by Mr. A. W. Kenyon, F.R.I.B.A., 21, Bedford-square, W.C.1.

BARKING.—SHOPS AND HOUSES.—The T.C. are inviting tenders for seven shops and flats in Axe-street, and 57 houses, Heath-street, and St. Paul's-road, and houses, Holly-square. The Borough Architect, Mr. C. C. Shaw, B.Arch. (Liverpool), A.R.I.B.A., has prepared the plans.

BARNET.—PUBLIC-HOUSE.—Messrs. Watney, Combe, Reid and Co., Ltd., Stag Brewery, S.W.1, propose to build a new hotel at the junction of Rushdene-avenue and Gallants Farm-road. The company's architect is Mr. A. W. Blomfield, F.R.I.B.A. No contracts placed.

BLOOMSBURY.—BUILDINGS.—To be occupied by the School of Oriental Studies are to be erected in Woburn-square, W.C.1, for the Senate of the University of London. The architect is Mr. Charles Holden, F.R.I.B.A. (Messrs. Adams, Holden and Pearson), 25, Torrington-square, W.C.1, and the quantity surveyors are Messrs. Widnell and Trollope, 26, Victoria-street, S.W.1. The contractors are Messrs. G. E. Wallis and Sons, Ltd., 8, Duncannon-street, W.C.2.

BOW. — ADDITIONS. — The L.M.S.R. has placed a contract with Messrs. G. H. Miller and Co., Ltd., Sheridan-works, Thorpe-road, Forest Gate, E., for extensions to the goods depot, Old Ford, E.3. Plans have been prepared by the company's Chief Engineer's Department, St. Pancras-chambers, Euston-road, N.W.1.

BRUTON-STREET.—OFFICES.—And showrooms, together with branch premises for Martins Bank, Ltd., Liverpool, are to be erected at No. 11, with frontages to South Bruton-mews. The plans have been prepared by Mr. Donald Hamilton, F.R.I.B.A., 356, Oxford-street, W.1, and the building contract has been placed with Messrs. Mullen and Lumsden, Ltd., 41, Eagle-street, W.C.1.

CANONBURY. — SETTLEMENT.—The Mary Ward Settlement is shortly to remove from Tavistock-place, W.C., to a site in Canonbury. Plans for the new building, which will cost £80,000, will be prepared by Sir Herbert Baker, R.A., and Mr. A. T. Scott, F.R.I.B.A., Romney House, Marsham-street, S.W.1.

CHINGFORD. — REBUILDING. — The "Prince of Wales" public-house, Hatch-lane, is to be rebuilt for Messrs. Charrington and Co., Ltd., Mile End-road, E.1. The plans have been prepared by Messrs. Tooley and Foster, Midland Bank-chambers, Buckhurst Hill. The quantity surveyors are Messrs. Gray, Robins and Crump, 49, Bedford-row, W.C.1. The successful contractors are Messrs. A. E. Symes, Ltd., 1a, Carpenter's-road, Stratford, E.15.

CLERKENWELL. — REBUILDING. — Of the "Shakespeare's Head" public-house, Percival-street, E.C.1, is proposed by Messrs. Charrington and Co., Ltd., Anchor Brewery, Mile End-road, E.1, whose staff architect is Mr. S. J. Funnell, L.R.I.B.A. No contracts let.

COULSDON. — FLATS. — Messrs. Morgan, Baines and Clark, 49B, Woodcote-road, Wallington, are the architects for five blocks of four flats and 12 garages in New-street, off Chipstead Valley-road. The builders are Messrs. Reeds (Estates), Ltd.

CRICKLEWOOD. — FACTORY.—And office block is to be erected in Cricklewood-lane, N.W.2. The architects are Messrs. Towndrow and Ransom, 14, Bloomsbury-way, W.C.1. No contracts placed.

EALING. — LICENSED PREMISES.—Messrs. Nowell Parr and Son, F.R.I.B.A., 97, Old

Brompton-road, S.W.7, are the architects for the erection of "The Plough" public-house, at the junction of Mandeville-road and Ealing-road, for Messrs. Fuller, Smith and Turner, Ltd., whose own building department are carrying out the work.

EALING.—PRESBYTERY.—Mr. T. H. B. Scott, F.R.I.B.A., 110, Horseferry-road, S.W.1, is the architect for the presbytery and extension to the Church of SS. Peter and Paul in Felton-road, and not as stated in our last issue. No contracts placed.

EDGWARE. — EXTENSIONS. — Including vestries, etc., are to be made to the St. Margaret's Church, Station-road. The architects are Messrs. Thomas H. Mawson and Son, 13, Victoria-street, S.W.1.

EDMONTON.—EXTENSIONS.—The E.C. are inviting tenders for the erection of new classrooms, cloakrooms, and extensions to the playing space at Oakthorpe Junior Mixed School, Tile Kiln-lane, N.13. Messrs. Talbot Brown and Fisher, Burystead-place, Wellingborough, are the architects.

ELTHAM.—SHOPS.—Plans have been prepared by Messrs. Davies and Knight, AA.R.I.B.A., 26, Langham-street, W.1, for a block of 7 shops and flats in Court-yard, S.E.9. The contractors are Messrs. L. F. Richardson, Ltd., 34, Mount Ephraim-road, Streatham, S.W.

EPSOM.—REBUILDING.—The plans for the rebuilding of the "Rifleman," East-street, have been approved.

EWELL.—HALL.—A plan has been submitted to the plans committee of the Epsom and Ewell Council on behalf of the Congregational Church Trustees for the erection of a church hall in London-road.

GRACECHURCH-STREET.—REBUILDING.—Plans have been submitted to the City Corporation for rebuilding and extension to Barclays Bank head office in Gracechurch-street and Lombard-street.

GREAT MARLBOROUGH - STREET. — OFFICES.—The Ecclesiastical Commission has granted a building lease of the site of St. John the Baptist Church, Nos. 49-51, for erection of a block of showrooms and offices, from plans by Messrs. Waite and Waite, 36, Cavendish-square, W.1. The contractors are Messrs. Prestige and Co., Ltd., 149, Grosvenor-road, S.W.1.

GREENFORD. — CLUB. — The Greenford British Legion are to have new club premises erected in Oldfield-lane, to plans by Mr. A. H. Taylor, 3, Maiden-lane, Crayford. The builders are Messrs. S. G. Smith and Sons, Ltd., 74, Bishop Ken-road, Harrow Weald. The tender price is £4,009.

HENDON.—BUILDING.—For storage purposes is to be erected on the east side of Edgware-road, N.W.9, for Messrs. Eugene, Ltd. The architects are Messrs. Bethell and Swannell, 16a, John-street, W.C.2.

HENDON.—ALTERATIONS.—And additions are to be made to the branch premises, 129, Brent-street, N.W.4, of Messrs. Barclays Bank, Ltd. The contract has been placed with Messrs. R. J. Schooley and Son, 5, Snowden-street, E.C.2. The architects are Messrs. Ley, Colbeck and Partners, 214, Bishopsgate, E.C. The quantity surveyor is Mr. V. H. Simpson, F.S.I., 19, Charing Cross-road, W.C.2.

HORNCHURCH. — POLICE STATION.—The Essex C.C. are inviting tenders for the erection of a police station. Mr. J. Stuart, F.R.I.B.A., is the County Architect.

HORNCHURCH.—EXTENSIONS.—Are to be made at the factory, Roneo Corner, Hornchurch-rd., for Messrs. Roneo, Ltd.

HOXTON.—EXTENSIONS.—Are to be made to the factory for Messrs. Dottridge Brothers, East-road, N.1. The architects are Messrs. Alfred and Vincent Burr, 85, Gower-street, W.C.1. No contracts placed.

ISLINGTON. — ALTERATIONS.—A contract has been placed for the alterations and additions to be made to the "Half Moon" public-house, 84, Essex-road, N.1, for Messrs. Taylor, Walker and Co., Ltd., Limehouse, E.14. The architect is Mr. Samuel A. S. Yeo, F.R.I.B.A., Station-chambers, Turnmill-street, E.C.1.

LEWISHAM HIGH-STREET.—OFFICES.—And stores are to be erected for the South Metropolitan Electric Light and Power Co., Ltd., 183, High-street, S.E.13. Plans have been prepared by Mr. James C. Anderson, 81, High-street, S.E.13. No contracts let.

LONDON.—BUILDING.—The L.C.C. are to make a grant to the managers of St. Clements C.E. non-Provided School of £15,248 for remodelling of the school in North Kensington to provide accommodation for 590 children. The tender of Messrs. C. P. Roberts and Co., Ltd., 31, High Holborn, W.C.1, has been accepted, at £42,703 for rebuilding of the Smithfield Meat Trades Institute, Holborn. The Unit Construction Co., Ltd., 1, Robert-street, W.C.2, are to carry out the erection of blocks 1 and 2 on the Ryehill estate, Camberwell, at £52,100. For erection of 103 dwellings on the Chicksand estate, Stepney, the estimate of Messrs. A. T. Rowley (London), Ltd., Cambridge-works, Lordship-lane, Tottenham, N.17, has been accepted at £16,122. At £404,168, the tender of the Unit Construction Co., Ltd., has been accepted for about 833 houses and flats, etc., on the Kidbrooke site, Greenwich.

MARYLEBONE. — FLATS.—The plans for block "D" of flats known as Townsend-court, Allitsen-road, Eamont-street, Frederick-street and Townsend-road, have been prepared by Mr. H. Kempton Dyson, Estate Office, Charlbert-court, N.W.8.

MARYLEBONE-ROAD.—OFFICES.—Messrs. Culpin and Son, 21, Ebury-street, S.W.1, are the architects for a new office building at 19, Marylebone-road and 20, Nottingham-place. Messrs. John Laing and Son, of Mill Hill, N.W.7, are the contractors.

MILE END-ROAD. — CONVERSION.—The Tower Hamlet Mission is to be converted into a synagogue, from plans prepared by Messrs. Seifert and Seifert, 114, City-road, E.C.1. The contract has been placed with Messrs. Chas. Bundock, Ltd., 41, Southgate-road, N.1.

MILL HILL. — PUBLIC-HOUSE. — Messrs. Courage and Co., Ltd., Anchor Brewery, Horselydown, S.E.1, have acquired a site in Watford-way for a new public-house. The company's architect is Mr. F. M. Kirby, F.R.I.B.A. No contracts let.

NEW OXFORD-STREET.—OFFICES.—And showrooms are to be erected on the island site of New Oxford-street, Bloomsbury-street and Bury-street, W.C.1, for the New Oxford Estates, Ltd., 6, Sackville-street, W.1. The plans have been prepared by Messrs. Lewis Solomon and Son, 21, Bloomsbury-way, W.C.1, and the building contract placed with Messrs. Ford and Walton, Ltd., 53, Victoria-street, S.W.1.

RICHMOND. — BRANCH. — Messrs. Speechley and Smith, Ltd., Excelsior-works, Kew-road, Richmond, are the contractors for the branch premises at 12, George-street, for Messrs. Martins Bank, Ltd., Liverpool. The architects are Messrs. Bromley, Cartwright and Waumsley, 6, Clarendon-street, Nottingham. The quantity surveyor is Mr. N. O. Waumsley, P.A.S.I., 3, St. James's-square, S.W.1.

ROMFORD.—EXTENSION.—At the annual meeting of Romford Victoria Hospital it was decided to proceed with the first part of a rebuilding and extension scheme involving an expenditure of approximately £51,400, and providing accommodation for 65 beds.

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SIDCUP.—HOTEL.—Messrs. T. W. Croft and Co., Ltd., Stanstead-road, S.E.23, propose to build a hotel, car park, etc., estimated to cost about £30,000, in Sidcup by-pass-road and Sevenoaks-way. Plans have been prepared by Messrs. Hendry and Stewart, FF.R.I.B.A., 90, Fenchurch-street, E.C.2. The quantity surveyors are Messrs. Gray, Robins and Crump, 49, Bedford-row, W.C.1.

SOUTHGATE. — HOUSES. — Eighty-three houses and garages are to be built in Overton-road and South Lodge-drive, N.14, from plans by Mr. G. W. Newman, 8, Bush Hill-road, N.21. The builders are Messrs. C. C. Pilgrim, Ltd., Estate Office, Myddelton-avenue, Enfield.

SOUTHWARK. — HOME. — The Catholic Nursing Institute has placed a contract with Messrs. M. J. Gleeson, Ltd., London-road, North Cheam, for a nursing home in Barkham-terrace and Lambeth-road, S.E. The total cost is estimated at £100,000. The architect is Mr. Robert Sharp, F.R.I.B.A., 13, Lower Belgrave-street, S.W.1.

STEPNEY. — ADDITIONS.—Messrs. T. G. Waterman, Ltd., Crown-works, Boundary-road, Plaistow, E.13, have secured the contract for alterations and additions to the "Waterman's Arms" beer-house, 44, Maroon-street, Stepney, E.14. The work is for Messrs. Mann, Crossman and Paulin, Ltd., Whitechapel-road, E.1, and the architects are Messrs. Stewart and Hendry, FF.R.I.B.A., 220, Whitechapel-road, E.1.

STOKE NEWINGTON. — HOSPITAL. — The Committee of the Jewish Maternity Hospital, 79-83, Lordship-road, are to have a new hospital erected. The architects are Messrs. Joseph, 2, Paul's Bakehouse-court, E.C.4.

STOKE NEWINGTON. — PREMISES.—The B.C. has approved a scheme for a cleansing station on a site in Clissold-road, which forms part of the land acquired in connection with the swimming-bath. The estimated cost is £2,433.

STRATFORD. — PREMISES. — No contracts yet placed for the surgery with living quarters over, air-raid shelter and garage, at 327, High-street. Messrs. Seifert and Seifert, 114, City-road, E.C.1, are the architects.

TOTTENHAM.—OFFICES.—And warehouse are to be built in Woodville-gardens, N.17, for Messrs. Spong and Co., Ltd. The plans have been prepared by Messrs. H. Seymour Couchman and Sons, 520, High-road, N.1.

TOTTENHAM. — DEPOT. — The T.C. has approved plans for Messrs. J. Lyons and Co., Ltd., Cadby Hall, West Kensington, W.14, for erection in Marsh-lane of a cold storage depot.

UPMINSTER. — FLATS.—Twenty-four self-contained flats are being erected in Waldegrave-gardens by the Building Department of the Upminster Estates, Ltd. The plans are by Mr. W. D. Key, 4-12, Palmer-street, S.W.1.

WEST HAM. — ADDITIONS.—No contracts yet placed for the alterations and additions to the "Railway Tavern" public-house, 145, Victoria Dock-road. Messrs. Stewart and Hendry, FF.R.I.B.A., 90, Fenchurch-street, E.C.3, are the architects.

WEST HAM.—REBUILDING.—No contracts yet placed for the rebuilding of 178, Major-road at the corner of Crownfield-road. Messrs. C. Living and Son, 75, The Grove, Stratford, E.15, are the architects.

WEST HAM. — REBUILDING. — Messrs. Charrington and Co., Ltd., Anchor Brewery, Mile End, E.1, are having the "Dartmouth Arms" public-house in Bidder-street, at the corner of New-road, rebuilt. The plans are by Mr. S. C. Clark, F.R.I.B.A., 86, Fenchurch-street, E.C.3. The builders are Messrs. Wm. Loweth and Sons, Ltd., 67, Downs Park-road, Hackney, E.8.

WESTMINSTER. — ADAPTATIONS. — Are to be carried out at the H.M. Stationery Office in Princess-street, S.W.1, by Messrs. Soole and Son, Ltd., Dunstable-works, Sheen-road, Richmond, for H.M.O.W.

WHITEHALL.— ADDITIONS. — H.M.O.W. has placed a contract with Messrs. Speirs, Ltd., 66, Victoria-street, S.W.1, for additional storeys to the Home and Colonial Offices.

WILLESDEN. — FACTORY.—A three-storey factory is to be built in Chase-road, N.W.10, for Beethoven Electrical Equipment. The architect is Mr. I. Schultz, 101, Alexandra-road, St. John's Wood, N.W.8, and a contract for part of the work is being placed with Mr. Frank Eve, 29, Whitehall, S.W.1.

NEW CINEMAS

BANBURY. — Messrs. L. F. Richardson, Ltd., 34, Mount Ephraim-road, Streatham, S.W.16, are carrying out the demolition and building operations in connection with the cinema to be erected on a site in the Horse Fair. The architect is Mr. A. P. Starkey, Westminster Bank-chambers, Station-road, Harrow.

DEVONPORT. — Mr. David E. Nye, F.I.A.A., 54, Tufton-street, S.W.1, has prepared plans for the erection of a cinema.

SOWERBY BRIDGE.—Mr. J. H. Freer, Penistone-road, Fenay Bridge, Huddersfield, is the architect for the erection of a cinema on a site fronting Wharf-street for a local cinema company.

SUNDERLAND. — Messrs. Bell Bros. (Sunderland), Ltd., builders, Newcastle-road, have received permission to erect a cinema in Barnes Park-road and Durham-road. The architect is Mr. H. Wiles, Low Fell, Durham.

TOWER BRIDGE-ROAD. — Messrs. Andrew Mather, Leicester-square-chambers, W.C.2, have submitted plans to the L.C.C. for the erection of a theatre on a site in Tower Bridge-road, near the "Bricklayers' Arms," Old Kent-road.

A.R.P. SCHEMES

MIDDLESEX.—It has been recommended to the C.C. that the West Middlesex Drainage Committee be authorised to carry out the following works and provision against air raids in respect of the Mogden Works and Sewerage System in West Middlesex, provided the appropriate Government grant is made towards the expenditure: The provision of the 33 overflows with penstocks and other controlling devices, £5,500; acquisition of stores for the main sewerage system, £3,500; protection of the power station and main pumping station and the provision of material, £4,000; installation of an additional pump for sludge disposal, £5,000; auxiliary plant for generating electric power, £4,000; the acquisition of miscellaneous stores, £5,500; total, £27,500.

NORTHUMBERLAND.—The C.C. is being recommended to spend £44,420 on A.R.P.

WANDSWORTH.—The B.C. have invited tenders for three alternative methods of construction for the permanent lining of nine blocks of trenches in Wandsworth Park. Mr. Edward Hunt, F.R.I.B.A., has been requested to prepare detailed drawings for the establishment of a report centre and central control headquarters at the municipal buildings.

WORKSOP.—An air raid shelter is being constructed in Danesfield-road, Spacken Hill Estate, with accommodation for 200, for Messrs James Allison, Ltd., builders, 19, Dunstane-crescent. Messrs. Allison, Ltd., are the builders.

FIVE-YEAR PLAN

GLASGOW.—The housing programme of the Corporation for the next five years provides for the erection of 27,307 houses. Tenders for 4,604 have been submitted to the housing department, and sites are to be sought for 22,703 houses.

LITHERLAND.—Expenditure in the five years programme of capital works is £152,473. Items include erection of the Council Offices and Town Hall, £22,456; 72 houses, £31,500; new depot, £10,600; sports club and club rooms, £2,500; municipal wash-house. £14,000; roads, £31,977.

SUNDERLAND.—The Health Committee's estimates include over £200,000 for developments during the next five years. T.C. are to consider report by committee on the provision of community centres on the Ford and Hylton-lane estates at £12,000.

WAREHAM AND PURBECK. — The R.D.C.'s estimates total £141,600. £40,000 is set aside for housing, £45,600 for sewerage, and £56,000 for water supply.

WARWICK.—The T.C. has prepared a schedule of capital works involving an expenditure of £137,558. The chief items are: Housing, £46,000; airport, £25,000; water supply, £22,614; sewers, etc., £10,550; swimming baths, £7,500.

WEST SUSSEX.—Five-year plan of the West Sussex County Council amounts to £2,030,536. Items included are: County buildings, £7,936; mental hospitals, £31,000; housing, £16,700; police buildings, £74,000; approved schools, £16,570; court houses, £44,516.

PUBLIC WORKS

GREAT BRITAIN.—Following are notes on some loans sanctioned by the Minister of Health during the week ended February 25: Barnsley C.B.C.—£60,168 for 176 dwellings, Park House Housing Site (Section No. 3); Basford R.D.C.—£16,100 for sewerage and sewage disposal; at Costock and East Leake; Bristol C.B.C.—£57,300 for 162 houses, Knowle and Bedminster Estate; Doncaster C.B.C.—£85,000 for provision of continuous vertical retort installation at gasworks; Edmonton B.C.—£40,520 for 35.83 acres of land north of Cuckoo Hall-lane, Edmonton; Kingston-upon-Hull C.C.—£67,337 for Hopewell-road Coun. Sch.; Leeds C.B.C.—£40,000 for additional expenditure in connection with erection of 2,666 houses, Tipton Estate, and 32 houses and shops on various sites; Liverpool C.B.C.—£20,000 for purchase of various sites under Part V. Housing Act, 1936; Newcastle-upon-Tyne C.C.—£24,717 for works at Woolsington Municipal Aerodrome; Newport C.B.C.—£115,909 for main administration block of new Civic Centre; Nottingham C.C.—£148,996 for the Henry Whipple Coun. Sch.; Rowley Regis B.C.—£39,200 for erection of 100 houses, Bell-lane, and 14 houses, Station-road; Slough B.C.—£35,600 for works of water supply; Smethwick C.B.C.—£35,090 for 96 dwellings and 10 shops, together with construction of roadworks, on various sites; Swinton and Pendlebury B.C.—£21,666 for 60 houses, Gate-street site.

GT. BRITAIN.—Among contracts advertised in this issue by local authorities as being open to tender are: Litherland U.D.C.—62 houses and 10 bungalows, Kirkstone-road North; Marlow U.D.C.—12 houses and 4 bungalows, Bewick-road; Bishop Auckland U.D.C.—swimming baths.

GREAT BRITAIN (Miners' Welfare Committee).—The committee announce that building tenders are about to be invited for new pithead bath installations at Blantyreferme 1 and 2 (Lanarkshire), for 668 men; Gateside (Lanarkshire), for 576 men; and South Pelaw (Durham), for 756 men.

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TRADE NEWS

Change of Address.

Messrs. Keith Blackman, Ltd., inform us that on and after Monday, March 13, the head offices and London works of the company will be at Mill Mead-road, Tottenham, London, N.17. Tel.: Tottenham 4522 (12 lines). Telegraphic Address: "Keithblac, Phone, London." The new offices and works have been erected on a 10½-acre site close to Tottenham Hale station. New manufacturing plant has been installed.

A New Catalogue.

Messrs. Geo. W. King, Ltd., of Hitchin, have recently issued a new comprehensive catalogue dealing with their conveying systems. Fully illustrated, the catalogue contains descriptions of the various components which together form what are known as King Conveyors. The two types of simple monorail, on which the catalogue chiefly concentrates, —"Double-Bead Track" conveyors for loads up to one ton, and "Super-Track" conveyors, for loads up to three tons—are entirely different in design, but either together or separately can be made to serve a number of different purposes. Both types are illustrated and described in detail.

Glazed Terra-Cotta: a Brochure.

Messrs. Doulton and Co., Ltd., Royal Doulton Potteries, Lambeth, S.E.1, have recently issued a brochure dealing with the advantages and uses of modern glazed terra-cotta. A foreword to the brochure, which contains a number of illustrations of buildings on which Doulton glazed ware—"Carraraware"—or Doulton terra-cotta have been used, states that to-day a new generation of architects is using terra-cotta and glazed materials in a new way—no longer in mere imitation of stone. "There is being evolved a special expression which takes advantage of the characteristics of the material, the tendency being to use it rather as a covering skin than as a weight-bearing and functional element.

A Firm's Recent Contracts.

Among the contracts recently secured by Messrs. P. C. Richardson and Co. (Middlesbrough), Ltd., are the following: one brick chimney, 150 ft. high and 10 ft. internal diameter, at Shotton, Chester, for Messrs. John Summers and Sons, Ltd.; one brick chimney, 120 ft. high and 5 ft. internal diameter, at Poole Sanatorium, Nunthorpe, Yorks (Messrs. W. and T. R. Milburn, 17, Fawcett-street, Sunderland, architects, and Messrs. John McCreton, Ltd., North Ormesby, Middlesbrough, main contractors); one brick chimney, 83 ft. high and 4 ft. 6 in. internal diameter, at South Shields Isolation Hospital, Messrs. Gustavus Bailey, Ltd., South Shields, main contractors (subject to the approval of the Ministry of Health).

U.K. PAVILION, NEW YORK.

The New York World's Fair opens its gates on April 30 next, the 150th anniversary of the inauguration of America's First President. The theme of the exhibition is "Building the World of To-morrow." The United Kingdom Exhibit occupies two pavilions connected by a bridge. The South Pavilion, the grand vestibule to the larger North Pavilion, will have two sets of nickel-silver doors leading to two circular vestibules which are the twin entries to the series of apartments forming the Court of Honour. These doors, which were shown to a number of architects and others at a lunch at Grosvenor House on Monday, were designed by Messrs. Stanley Hall and Easton and Robertson, FF.R.I.B.A., the architects for the British Pavilion, and executed by Messrs. J. Starkie Gardner, Ltd., a view being given on page 460. Each set comprises four pivot-hung doors surmounted by a fixed head. The overall height of the doorway is 14 ft. and the width 12 ft. The weight of each individual door is 3½ cwt., and the weight of each set 1½ tons. The doors are executed in Wiggin 20 per cent. nickel-silver, the nickel being produced by the Mond Nickel Co., in South Wales.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender, unless stated to the contrary. The dates at the head of paragraphs are those for the submission of tenders: a dagger (†) denotes closing date for applications; the name and address at the end refer to the person from whom particulars may be obtained. Abbreviations: (A.) for A.R.I.B.A.; B. of E. for Board of Education; B.C. for Borough Council; B.E. for Borough Engineer; B.S. for Borough Surveyor; C. for Clerk; C.B. for County Borough; C.C. for County Council; C.E. for County Engineer; C.S. for County Surveyor; D.S. for District Surveyor; E. for Engineer; E.C. for Education Committee; (F.) for F.R.I.B.A.; (L.) for L.R.I.B.A.; M.W.B. for Metropolitan Water Board; M.H. for Ministry of Health; M.T. for Ministry of Transport; P.C. for Parish Council; R.D.C. for Rural District Council; S. for Surveyor; T.C. for Town Clerk and Town Council; and U.D.C. for Urban District Council.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, &c.

MARCH 11.

†**Smethwick C.B.**—28 maisonettes, Halford-st. R. Fletcher, B.E. and S. Dep. £2 2s.

MARCH 13.

†**Lancashire C.C.**—Works at new senior council school, Great Sankey and Penketh, nr. Warrington. Quiggin & Gee, architects, North House, 17, North John-st., Liverpool, 2. Dep. £2.

MARCH 14.

†**Birmingham P.A.C.**—Asphalt work at observation blocks and boiler-house at Erdington House. Martin & Martin and W. H. Ward, architects, 106, Colmore-row, Birmingham. Dep. £1 1s.

✱**Burnaston (nr. Derby).**—Hangar and annexe at Airport. Norman & Dawbarn, architects, Universal House, 60, Buckingham Palace-rd., London, S.W.1. Dep. £3 3s.

MARCH 15.

✱**Bedford R.D.C.**—7 houses. C. Dep. £2 2s.

Bexhill T.C.—Sedimentation tank, lime store and chemical dosing house in reinforced concrete at Sweet Willow Wood pumping station. E. Pollard, Water E. Dep. £1 1s.

Birmingham T.C.—Constructional steelwork for hangar, Elmdon Airport. Norman & Dawbarn, architects, Universal House, 60, Buckingham Palace-rd., London, S.W.1. Dep. £3 3s.

†**Birmingham T.C.**—Reconstructed stone for new observation blocks and boiler house at Erdington House. Martin & Martin and W. H. Ward, architects, 106, Colmore-row. Dep. £1 1s.

✱**Bishop Auckland U.D.C.**—Swimming baths. C. Dep. £2 2s.

Bristol T.C.—Relief depot at Jacobs Wells. J. Nelson Meredith (F.), Eagle House, Colston-av. Dep. £1 1s.

Culter (H.M.O.W.).—Automatic telephone exchange. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1.

Dalton (H.M.O.W.).—Telephone repeater station at Lochmaben-rd., Dalton, Dumfries-shire. Architect, H.M.O.W., 122, George-st., Edinburgh, 2. Dep. £1.

Deben R.D.C.—28 houses at Ufford, Little Bealings, Hasketon and Chillesford. S. Dep. £2 2s.

East Retford R.D.C.—12 houses at Ragnall and 4 houses at Barnby Moor. L. Tattersfield, architect, Amcott House, Grove-st. Dep. £2 2s.

Edmonton T.C.—(a) Asbestos roofing and rainwater goods; (b) steel rolling shutters; (c) patent glazing for central depot, Edmonton. E. J. Willis, B.E. and S.

Feltham U.D.C.—Pavilion at the Glebe Land. H. W. A. Carter, E. and S. Dep. £1 1s.

Fraddon.—Reconditioning throughout of Methodist chapel and schoolroom. J. Gregor, Ashley Villa, Fraddon.

Guildford R.D.C.—6 cottages and construction of road at West Horsley. J. W. Wilton, E. and S. Dep. £2 2s.

Huddersfield C.B.—72 houses on Netheroyd Hill-rd. housing estate. B.E. Dep. £3 3s.

London (H.M.O.W.).—Alterations at Bradshawgate (Bolton) Ministry of Health and Unemployment Assistance Board; erection of Hamble (Southampton) telephone exchange; Kirkham (Lancs) T.E., and Rushden (Northants) post office. Room 71, ground floor, Office of Works, S.W.1. Dep. £1 each.

Manchester T.C.—Demolition of 451 houses, shops, and premises, public-houses, and buildings bounded by Sainsbury-st., Harding-st., Mitchell-st., Taunton-st. and the River Medlock. Director of Housing, Town Hall. Dep. £1 1s.

Morecambe and Heysham T.C.—Additional conveniences, Poulton Hall coach station. B.S. Dep. £1.

Near Harrogate.—Conversion of building into fire station at Summerbridge, nr. Harrogate. Marshall & Storey, architects and surveyors, 73, Station-parade, Harrogate.

North-West Midlands Joint Electricity Authority.—Distribution stores on site of Bucknall substation, Leek-rd., Bucknall. Adams & Edwards, Stafford-chambs., 3, Brook-st., Stoke-on-Trent.

North-West Midlands Joint Electricity Authority.—Control room and switch-house at Stafford generating station, Foregate, Stafford. Adams & Edwards, Stafford-chambs., 3, Brook-st., Stoke-on-Trent.

Northern Ireland Government.—New R.U.C. barrack at Portstewart, County Londonderry. Secretary, Ministry of Finance (Room 128), May-st., Belfast. Dep. £1.

Northumberland C.C.—Bedlington, West Sleekburn new senior council school, electrical installation: Bedlington, West Sleekburn new senior council school, heating and hot water services, and Berwick, Tweedmouth new senior council school, heating and hot water services. County Architect, County Hall, Newcastle. Dep. £2 2s. each.

Ripon Corporation, Ripon and Pateley Bridge and Wath R.D.C.'s Joint Fire Brigade Committee.—Alterations to fire station in Blossomgate. Marshall & Storey, architects, 73, Station-parade, Harrogate.

Scottish Agricultural Dept.—10 dwelling-houses and 10 small steadings at High Langside Farm. Chief E. and S., York-bldgs., Queen-st., Edinburgh. Dep. £1 1s.

Stroud R.D.C.—Two three-bedroom non-parlour type "B" houses at Aston Down, Minchinhampton, and two three-bedroom non-parlour type "A" houses at Backfields, Whiteshill. R. Bird, S. Dep. £2 2s.

Wallasey C.B.—Police sub-station, bus shelter, etc., at Leasowe-rd. B.E. Dep. £2 2s.

Wanstead T.C.—Annual repair and internal decoration of houses. A. D. Ward, B.E.

Winchester R.D.C.—Pair and one block of 3 houses at North-st., Bishop's Sutton; 3 pairs of houses and one pair of semi-bungalows at Pound-ln., Old Netley; one pair of houses at Coles Mede, Otterbourne, and one pair of houses, nr. "Woodman Inn," Sparsholt. Edward G. Brede, Building S., 45, Romsey-rd. Dep. £2 2s.

MARCH 16.

Aberdare.—Alterations to Palladium, for Hirwain Victoria Hall Co., Ltd. T. Roderick & Sons, architects, Clifton-st., Aberdare. Dep. £3 3s.

Aberdeen C.C.—Reconstruction of hall, Saltoun-pl., Fraserburgh. Tawse & Allan, civil engineers and architects, 10, Bon Accord-sq., Aberdeen.

Bristol.—Alterations and additions to No. 55, Broadmead, for Air Raid Precautions Committee. Bernard & Son, quantity surveyors, 26, Orchard-st., Bristol. Dep. £2 2s., payable to T.C.

Bromyard R.D.C.—Pair of cottages at Much Cowarne, nr. Bromyard. T. S. Watts, Sanitary Inspector, Winholme. Dep. £2 2s.

Dudley E.C.—Alterations at Wolverhampton-st. schools. Webb & Gray, architects, 200, High-st. Dep. £2 2s.

Eyemouth T.C.—40 houses, Glebe site. B.S. Dep. £1 1s.

Gloucestershire C.C.—Central depot at Coney Hill, Gloucester. C.S., Gloucester. Dep. £2 2s.

Irish Land Commission.—2 dwelling-houses and 2 out-offices, Cloushagh and Willsborough; dwelling-house, Arthurstown; dwelling-house, Killacullun; dwelling-house, Knockanotish; 4 dwelling-houses and out-offices, Cahervoostia; dwelling-house and out-office, Grallagh; 2 dwelling-houses and out-offices, Kanaghan. M. Deegan, secretary, Upper Merrion-st., Dublin. Dep. £1.

Lincoln T.C.—Materials for 43 houses, Newport and Mill Row. A. Adlington, City E. and So.

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London (H.M.O.W.).—Heating and hot-water installation at Langham (Museum) T.E. Room 71, Ground Floor, H.M.O.W., London. Dep. £1.

Moira R.D.C.—60 labourers' cottages and fencing. J. Moore, architect, 21, Mayfair, Belfast.

Monmouthshire C.C.—Renovations at Tredegar police station. C. L. Jones (F.), Queen's Hill Offices, Newport. Dep. £2 2s.

Newcastle-upon-Tyne T.C.—92 flats in two storeys, 58 cottages, and 10 lock-up shops on Wesley-st. site, Shieldfield. City Architect, 18, Cloth Market. Dep. £2 2s.

St. Germans R.D.C.—6 parlour-type houses at Trehill Cross, St. Dominic. J. Percival Heath, C. Dep. £2 2s.

Southwell R.D.C.—Two pairs houses, near Westgate. S. Cooper, S. Dep. £1 1s.

Sunderland C.B.—Extensions to Havelock senior schools. Education Architect, 4, Tatham-st. Dep. £2 2s.

Wolverhampton (G.W.R.).—Cleaning and repainting station buildings, etc., at Small Heath, Bordesley and Tyseley, and Hall Green, Shirley, etc. Divisional E., Wolverhampton.

✱**York.**—Senior school for boys, Margaret-st. Jones & Rickaby, architects, 102, Westborough, Scarborough. Dep. £2 2s.

MARCH 17.

Bridlington T.C.—Paper-baling shed at depot, Portland-pl. A. Everingham, B.E. and S.

Bristol T.C.—Underground conveniences and subway, Prince-st. J. Nelson Meredith (F.). Dep. £2 2s.

Chester C.C.—Council primary school, Croft-rd., Sale Moor. F. Anstead Browne (F.), County Architect, The Castle, Chester. Dep. £2 2s.

Chester C.C.—Sports pavilion and bowls house, county staffs' sports ground, Newton-by-Chester. F. Anstead Browne (F.), County Architect, The Castle, Chester. Dep. £1 1s.

Cornwall C.C.—External painting and repairs at Falmouth Institution. S. Pool (A.), County Hall, Truro. Dep. £1 1s.

Cumberland C.C.—Police house at (a) Alston and (b) Mealsgate. John H. Haughan (A.), County Architect, 4, Alfred-st North, Carlisle. Dep. £1 each.

Darfield U.D.C.—34 houses and street works and sewerage, Barnsley-rd., Dyson, Cawthorne & Coles, architects, 25, Regent-st., Barnsley.

Edinburgh T.C.—Mortuary, etc., at Western General Hospital, and bed lift at Ward 2, Colinton Mains Hospital. City Architect.

Helmsley R.D.C.—2 stone-built 3-bedroomed non-parlour type houses, in one block, at Old Byland. R. P. Brotton & Son, architects, Chop Gate, Middlesbrough. Dep. £1.

Louth T.C.—Underground conveniences, Market pl. J. C. Barber, B.E. and S. Dep. £2 2s.

Neath T.C.—10 houses, Giants Grave-rd., Briton Ferry. H. Alex. Clarke, B.E. Dep. £3.

North Cotswold R.D.C.—4 houses at Broadwell; 5 houses at Evenlode. J. E. Busfield, S. Dep. £2 2s.

North-Eastern Housing Assn., Ltd.—45 houses in Alfred-st. and Everard-st., Hartlepool. J. H. Miers, B.E. and S., Hartlepool. Dep. £3 3s.

Rochdale C.B.—External painting of 1,044 houses. B.S.

Salop C.C.—Low-pressure hot water heating installation and domestic hot water supply at Whitchurch senior council school. A. G. Grant, County Architect, 5, Belmont, Shrewsbury. Dep. £1.

Tenterden R.D.C.—Repairs to 236 Council houses. S.

Thurrock U.D.C.—External painting of houses on housing estates. G. F. Andrassy, S. Dep. £1 1s.

Tynemouth C.B.—10 police dwellings, Stephenson-st., North Shields. D. M. O'Herlihy, B.S., 19-20, Howard-st., North Shields. Dep. £2 2s.

✱**Warwick C.C.**—School at Kingsbury. A. C. Bunch (F.). Dep. £2 2s.

Watford T.C.—Pumping station and softening works buildings, reinforced concrete chlorination tank and aerator, chlorinator house, at The Grove, Hemel Hempstead-rd. W. W. Newman, B.E. Dep. £5 5s.

Worksop T.C.—Water softening house at water pumping station, Sunnyside. C. O. Allsopp, B.E. Dep. £4 4s.

MARCH 18.

Church Stretton U.D.C.—Alteration to council offices, Beaumont-rd. A. B. Deakin & Son, architects, 1 and 2, Talbot-chams., Shrewsbury. Dep. £3 3s.

East Kesteven R.D.C.—3 pairs of workpeople's dwellings, Timberland. Architect, Council Offices.

Eccles.—Alterations and additions to open-air school at Peel Green. B.E. and S., Town Hall. Dep. £1 1s.

Kettering T.C.—Sports pavilion, Avondale playing field. J. P. Haugh, B.E. and S., 3, Gold-st. Dep. £1 1s.

North Cork Board of Health and Public Assistance.—Pumps and water supplies in Mallow, Charleville, Fermoy, Kanturk and Millstreet rural districts, and repairs to cottages in Mallow, Fermoy, Kanturk, Millstreet, Mitchelstown and Charleville districts. Sec., County Hospital, Mallow.

Reigate T.C.—Strengthening ceilings of basement rooms at the Town Hall. B.S. Dep. £2 2s.

Sheffield T.C.—Master's house, Firvale Institution. W. G. Davies, City Architect. Dep. £2.

Turriff T.C.—3 blocks each containing 2 houses, at Woodlands site. B.S.

MARCH 20.

Abergavenny T.C.—Swimming pool in Bailey Park. B.S. Dep. £3 3s.

Barking T.C.—Town Hall and Municipal Offices. T.C. Dep. £15 15s.

Birkenhead C.B.—40 tenements, Ilchester-rd. B.E. and S. Dep. £2 2s.

Bradford T.C.—Demolition of Kirkgate chapel and schools. City E. and S.
Carlisle T.C.—Electrical installations to 150 houses on Belah estate, Stanwix. City E. and S., 18, Fisher-st.
Chipping Norton T.C.—Alterations and additions at town hall. B.S. Dep. £2 2s.
Darton U.D.C.—38 houses at Redbrook. Chief Sanitary Inspector.
Dore and Bredwardine R.D.C.—Houses at Abbeydore. C. E. T. Booth, Kyrle-st., Hereford. Dep. £2 2s.
Durham C.C.—Hospital at "Dryburn." C.E. Dep. £3 3s.
Havant U.D.C.—External painting, Council depot, off Park Way, Havant; offices, etc., 1, Park-rd. North, Havant. E. and S. Dep. £1 1s.
Hemel Hempstead T.C.—Interior decorative repairs to 18 houses, Chapel-st.; interior decorative repairs to 24 houses, Sunmead-rd.; alterations and repairs to handicraft room at Two Waters central school. B.E.
Heston and Isleworth T.C.—Offices at Douglas-rd., Hounslow. J. G. Carey, B.S. Dep. £3 3s.
Hyde E.C.—Extensions at Greenfield-st. school. Secretary. Dep. £1.
***Leyton C.C.**—Conversion at Capworth-st school. John H. Jacques (F.), 61, West Ham-ln., E.15. Dep. £1.
Liverpool T.C.—Council school at Herbert-st. City Architect and Director of Housing. Dep. £2 2s.
London (H.M.O.W.).—Urmston branch Post Office, Key-st. (Kent); telephone repeater station. Room 71, Ground Floor, Office of Works, S.W.1. Dep. £1 each.
Manchester T.C.—Conversion of tramcar depot into motor bus garage at Princess-rd. City Architect. Dep. £1 1s.
Meridan R.D.C.—(1) 3 pairs of semi-detached houses, 1 pair of semi-detached bungalows, Needler's End-ln., Balsall; (2) 2 pairs of semi-detached houses, block of 3 houses, pair of semi-detached bungalows, Shustoke Green, Shustoke. H. Pickering, E. and S. Dep. £2 2s. in each case.
Newcastle-upon-Tyne T.C.—Reconstruction of vegetable market, Clayton-st. and St. Andrew's-st., and admission hospital, convalescent homes, etc., at City Mental Hospital, Gosforth. City Architect, 18, Cloth Market. Deps. £3 3s. each (separate contracts).
Raunds U.D.C.—7 houses, Stanwick housing site. G. Whittam, S. Dep. £2 2s.
Sevenoaks R.D.C.—Four flats, Vicarage-hill, Westerham. S. Dep. £2 2s.
***Sevenoaks U.D.C.**—Store, in connection with A.R.P., Bradbourne-pk. stables. E. and S., Argyle-rd Dep. £1 1s.
Sheerness U.D.C.—Bath hall, café and conveniences at open-air swimming pool. E. and S. Dep. £2 2s.
Southampton C.B.—Electrical installation at administration block and staff home of new West End Institution. S. G. Stanton, B.E. Dep. £2 2s.
Southend-on-Sea C.B.—Bungalow and convenience at Propagation Centre, Southchurch. B.E. Dep. £1.
Swanscombe U.D.C.—Extension to fire station, Church-rd. L. E. Croucher, S. Dep. £1 1s.
Wembley T.C.—Maternity and child welfare clinic in Church-ln., Kingsbury. Borough Treasurer, 117a, High-rd. Dep. £2 2s.
Wembley T.C.—Electric light, power and heating installations at Northern Fire Station, The Mall, Kingsbury. Borough Treasurer, 117a, High-rd. Dep. £2 2s.
***West Ham C.B.**—Surgery and dwelling-house, High-st., Stratford. W. S. Jenkins, B.E. Dep. £2.
West Riding C.C.—Installation of hot-water heating and electric lighting at Darfield new senior school; offices and alterations at Dearne Goldthorpe council school. Education Officer, County Hall, Wakefield.
Wimbledon.—Cleaning-down and painting of street lamp-posts. Chief Engineer and Manager, Electricity House, Durnsford-rd., S.W.19.
†Wolverhampton C.B.—10 houses, Deans-rd; erection of 38 houses, Old Heath-rd. B.E. Dep. £2 2s. each.

MARCH 21.

Bedford T.C.—Demolition of building and erection of offices and stores, etc., electricity works, Prebend-st. Ivan Daughtry, 1, St. Paul's-sq. Dep. £2 2s.
Blackwell R.D.C.—Eight houses and 12 bungalows at Houghton-la., Pleasley. A. H. Elliott, A.M.Inst.C.E., Gilcroft-chambs., Church-la., Mansfield. Dep. £5 5s.
Bristol T.C.—Fire-resisting steel screens, steel walkway, etc., at Portishead generating station. Chief E., Colston-av. Dep. £2 2s.
Commissioners of Public Works.—Cloonanaha national school; St. Michael's (Slieveragh) national school, improvements; Moyglass national school, erection; Mullinavat boys' national school, erection. Geo. P. Fagan, secretary, Office of Public Works, Dublin. Dep. £1 each.
Darlaston U.D.C.—12 dwelling-houses and 4 shops with living accommodation at Catherine's Cross redevelopment area. H. N. Hughes, E. and S. Dep. £2 2s.
Epsom and Ewell T.C.—174 houses off Cox-ln., Ewell. W. G. H. Loveless, 51/53, High-st., Epsom. Dep. £3 3s.
Leeds E.C.—Erection of Farnley council juniors' and infants' schools. Director of Education. Dep. £2 2s.
London (H.M.O.W.).—Alterations to Sheffield Head P.O. for telephone exchange; extension to Woodgate telephone exchange, and erection of Calne telephone exchange (Wilts). Room 71, Ground Floor, Office of Works, S.W.1. Dep. £1 each.
Newark T.C.—Alterations to premises, Balderton Gate. John H. Clarke, B.S.
Newry Union.—Dispensary and doctor's residence at Mullaghglass. J. L. O'Hagan, architect, 3, Kildare-st.
Pembrey (H.M.O.W.).—Heating and hot water at Royal Ordnance Factory. Room 71, Ground Floor, H.M.O.W., London, S.W.1. Dep. £1.
York T.C.—30 houses and 48 flats, Cemetery-rd.; 2 houses, Link-av., and 2 flats in Dale-st. City E. Dep. £1 1s.

MARCH 22.

Banbury R.D.C.—Demolition of 40 houses. A. Hunt, Castle Wharf, Banbury.
Barking T.C.—Shops and flats, Axe-st.; houses, Heath-st. and St. Paul's-rd. and Holly-sq. C. C. Shaw (A.). Dep. £5 5s.
***Beaminster R.D.C.**—10 houses. C. Dep. £1 1s.
Bristol T.C.—Buildings at South Bristol open-air school, Novers. Messrs. Gleed, 40, Corn-st. Dep. £2 2s.
Bristol T.C.—Additions to Fonthill-rd. school, Southmead. Bernard & Son, 26, Orchard-st., College Green. Dep. £2 2s.
Downham R.D.C.—34 non-parlour cottages and 10 bungalows at Southery. H. J. Diver, E. and S. Dep. £1 1s.
Guildford T.C.—Superintendent's cottage, Castle grounds. B.S. Dep. £2 2s.
Harwich T.C.—Fencing works to playing fields in Low-rd., Dovercourt. F. H. French, B.E.
Liverpool Corporation.—Interior cleaning and painting at Central lending library, William Brown-st. City E. and S.
Liverpool T.C.—247 houses at Speke. T.C. Dep. £1 1s.
Liverpool T.C.—64 flats for aged persons on Sparrow Hall estate. City Architect and Director of Housing. Dep. £1 1s.
London (H.M.O.W.).—Houghton-le-Spring telephone exchange (Durham). Room 71, Ground Floor, Office of Works, S.W.1. Dep. £1.
London (H.M.O.W.).—Witham post office, sorting office and garage. Room 71, Ground floor, Office of Works, S.W.1. Dep. £1.
Sturminster R.D.C.—Redecoration to 30 houses. Housing Inspector.

MARCH 23.

***Bexley T.C.**—Alterations and additions to sub-station, Broadway. J. B. F. Cowper (F.), 38, Bedford-sq., W.C.1. Dep. £5 5s.
Birmingham T.C.—Public convenience at Sutton New-rd. and Wilton-rd., Erdington. H. J. Manzoni, City E. and S. Dep. £2 2s.
Bolton C.B.—44 houses and bungalows, Cameron-st. estate, Astley Bridge. Housing Director, Westminster Bank-chambs., Old Hall-st. North. Dep. £2 2s.
Carmarthen R.D.C.—Council offices, 4, Spilman-st. T. G. Price, 44, Rhosmaen-st., Llandilo, and W. E. Jones, architects, 15, Spilman-st., Carmarthen. Dep. £2 2s.
Chertsey U.D.C.—1,100 lin. yds. of chain link fencing, 6 ft. high, with necessary standards, etc., at Heathervale recreation ground, Addlestone. W. V. Davies E. and S.
Treforest.—Light factory on Treforest Trading Estate, near Cardiff, for S.W. and M.T.E., Ltd. Sir Alexander Gibb & Partners, engineers, Queen Anne's Lodge, Westminster, S.W.1. Dep. £2 2s.

MARCH 24.

***Coulsdon and Purley U.D.C.**—Reroofing pavilion, Memorial Ground, Marlpit-ln, E. and S.
Lyndhurst P.C.—Removal of portion of existing stone boundary walling, erection of about 300 lin. yds. of Purbeck stone random walling, construction of storm water drains, paths and other incidental works for extension of burial ground at Bolton's Bench. Lemon & Blizard, civil engineers, Lansdowne House, Castle-ln., Southampton. Dep. £2 2s.
***Marlow U.D.C.**—12 houses and 4 bungalows, Berwick-rd. C. Dep. £2 2s.
North Riding.—Conversion of out-offices to water carriage system at Haxby council school. F. Barraclough, secretary, Education Offices, County Hall, Northallerton.
Romford T.C.—Alterations to Brookside Café, Collier Row-rd. B.E. Dep. £1 1s.
St. Helens E.C.—Gymnasia at Robins-ln. school. Biram & Fletcher (F.), 17, George-st. Dep. £2 2s.

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West Bromwich C.B.—Sub-contracts in connection with erection of maternity block at Hallam Hospital. T.C.
Wick (H.M.O.W.).—Telephone repeater station at Union-st. Architect, 122, George-st., Edinburgh, 2. Dep. £1.

MARCH 25.

***Bedford T.C.**—Public elementary school. Director of Education, Bromham-rd. Dep. £2 2s.
Bury T.C.—Conversion of shops, 488a and 490, Walshaw-rd., into dwelling houses. B.E. and S. Dep. 10s.
***Welwyn Garden City U.D.C.**—254 houses, 20 flats and 12 garages, etc. C. Dep. £2 2s.

MARCH 27.

***Coulsdon and Purley U.D.C.**—Public conveniences and bus shelter, Limpsfield-rd., Sanderstead. E. and S. Dep. £2 2s.
Diss U.D.C.—Conversion of 11 and 12, Markethill into council offices. A. F. Scott & Sons (FF.), 25, Tombland, Norwich. Dep. £1 1s.
Dorchester R.D.C.—Demolition of three cottages and erection of two pairs of semi-detached houses at Toller Porcorum. F. E. Jay, architect and surveyor, 77, St. Thomas-st., Weymouth. Dep. £1 1s
Durham C.C.—Slaters' work at Stockton-on-Tees secondary schools. F. Willey (F.), 34, Old Elvet.
Durham C.C.—Additions to Billingham South Intermediate C. School. F. Willey (F.), 34, Old Elvet.
Durham C.C.—Improvements to heating apparatus and for attendant work at Horden Colliery junior girls' council school. F. Wiley (F.), 34, Old Elvet, Durham.
***Litherland U.D.C.**—62 houses and 10 bungalows, Kirkstone-rd. North. E. and S. Dep. £2 2s.
London (H.M.O.W.).—Alterations to Huddersfield Head Post Office. Room 71, Ground Floor, Office of Works, S.W.1. Dep. £1.
***London (H.M.O.W.).**—New mills (Derbyshire); telephone exchange; East Stour Telephone Repeater Station; Sevenoaks Telephone Exchange. Room 71, ground floor, Office of Works, S.W.1. Dep. £1 each.
***Norwich T.C.**—Flooring and roofing maternity home. City Architect, City Hall.
***Reading C.B.**—Pavilion at Christchurch playing field. B.S. Dep. £2 2s.
***Salford T.C.**—Internal reconstruction of ground-floor library and reading-room at Peel Park libraries, and erection of transformer sub-station at corner of Regent-rd. and Ordsall-ln. City E. Dep. £5 5s.
Scottish Special Areas Housing Association, Ltd.—284 timber houses at Watling-st., Motherwell. F. Smith & Partners, 4, Regent-st., Hamilton.
West Hartlepool C.B.—Sanitary fittings for Dyke House senior council school. F. Durkin, B.E.

MARCH 28.

***London (H.M.O.W.).**—Extensions to Dronfield telephone exchange (Derbyshire); Great Harwood telephone exchange, Lancs; alterations to Newcastle-on-Tyne, Neville-st. Branch Post Office. Room 71, ground floor, Office of Works, S.W.1. Dep. £1 each.

MARCH 29.

***Caterham and Warlingham U.D.C.**—Alterations to council offices, Harestone Valley-rd. S. Dep. £2 2s.
***West Sussex C.C.**—Police station, etc., Worthing. C. G. Stillman (F.), Chichester. Dep. £2 2s.

MARCH 31.

***London (H.M.O.W.).**—Cheapside (Birmingham) Town Sub Office. Room 71, ground floor, Office of Works, S.W.1. Dep. £1.
***Staffordshire C.C.**—Alterations, and additions to Mount Pleasant C. School, Quarry Bank. Director of Education. Dep. £3 3s.
***Staffordshire C.C.**—Senior (mixed), Cherry Orchard, Lichfield. Director of Education. Dep. £5 5s.

APRIL 1.

†Chippenham and Malmesbury Joint Isolation Hospital.—Bathroom at Isolation Hospital, Frogwell. County Architect, Trowbridge.
***Cornwall C.C.**—Reconstruction and additions, Callington council school. County Architect, Truro. Dep. £3 3s.

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MARCH 15.

Bridgend U.D.C.—R. C. Bestow, S.
Carshalton U.D.C.—Paint, etc. C. P. Ingram, Estates Manager, The Grove.
Edinburgh (H.M.O.W.).—Electric light fittings at new Government buildings. Engineer, 122, George st., Edinburgh, 2. Dep. £1.
Eston U.D.C.—E. and S.
Hamilton T.C.—W. Crawford, T.C.
Higham Ferrers T.C.—A. E. Lloyd, B.S.
Inverness C.C.—C. S., Ardross-st., Inverness.
Marple U.D.C.—T. Cooper, S.
Newburn U.D.C.—S.
Warwickshire C.C.—D. H. Brown, C.S., Warwick.

MARCH 16.

Haslemere U.D.C.—C. A. Best, S.
Sandy U.D.C.—C.
West Hartlepool T.C.—F. Durkin, B.E.
Wigston U.D.C.—G. F. Stacey, E. and S.

MARCH 17.

Altrincham T.C.—B.S.
Croydon C.B.—B.E.
Ipswich C.B.—E. McLaughlan, B.E.
Lancaster T.C.—F. Hill, City E.
Lewes T.C.—C. T. Butler, B.S.
Motherwell and Wishaw T.C.—B.E.
Radnorshire C.C.—J. A. Paterson, C.S., Llandrindod Wells.
Ramsgate T.C.—R. D. Brimmel, B.E., 16, Albion-pl.
Salop C.C.—W. H. Butler, C.S., Shrewsbury.

MARCH 18.

Armagh C.C.—Road tar. C.S.
Bucks.—Materials and fittings of various sorts. City Architect, County Offices.
Dewsbury T.C.—9,500 yards of 12 in. dia. steel pipes, with a quantity of steel specials. G. E. V. Boldry, 10, Church-st.
Godstone R.D.C.—C.
Horsforth U.D.C.—S.
Loughborough T.C.—W. Granger, B.S.
Stewartry of Kircudbright C.C. — Fencing materials. Robert Gibson, County Road Surveyor, Kirkcudbright.
Sudbury T.C.—R. G. Coles, B.E. and S.
Whitchurch U.D.C.—F. Clayton, C.

MARCH 20.

Abertillery U.D.C.—A. Gordon Jones, E. and S.
Bentley-with-Arksey U.D.C.—R. N. Penlington, E. and S.
Chester-le-Street U.D.C.—W. Ridley, S.
Dover R.D.C.—I. G. Cathrall, Acting Highways S.
Elham R.D.C.—S.
Kenilworth U.D.C.—G. A. J. Edmundson, E. and S.
Urmston U.D.C.—E. L. Leeming, S.

MARCH 21.

Horsham U.D.C.—A. Slyfield, C.

ENGINEERING, IRON AND STEEL.

MARCH 15.

Bexhill T.C.—Sedimentation tank, lime store and chemical dosing house, Sweet Willow Wood pumping station. E. Pollard, Water E. Dep. £1 1s.
Darlington C.B.—Permanent lining of trenches. Ernest Minors, B.E. Dep. £1 1s.
Gillingham T.C.—Additional excavation and permanent lining of approximately 420 lin. yds. of trenches. B.S. Dep. £1 1s.
Rochdale C.B.—Construction in reinforced concrete Moss Bridge and Half Acre Bridge. S. H. Morgan, B.S. Dep. £2.

MARCH 16.

Llandovery T.C.—Concrete service reservoir and approximately 2½ miles of spun-iron pipes with fittings, etc. J. Owen Parry & Lewis, consulting engineers, Ammanford. Dep. £3 3s.
Northamptonshire C.C.—Reinforced concrete elevated tank at Berrywood mental hospital. Pick, Everard, Keay & Gimson, consulting engineers, 6, Millstone-ln., Leicester. Dep. £2 2s.
Seisdon R.D.C.—Contract No. 2 for Kinver sewerage and sewage disposal. Willcox, Raikes & Marshall, engineers, 33, Great Charles-st., Birmingham, 3. Dep. £5 5s.
South Africa.—Bridgework, for South African Railways and Harbours Administration. Dept. of Overseas Trade, S.W.1 (T.18992/39).
Stafford R.D.C.—For eastern area water scheme. Elliott & Brown, consulting engineers, Burton-bldgs., Parliament-st., Nottingham. Dep. £3 3s.

MARCH 17.

Colne Valley Sewerage Board.—Contract W.2 for Maplelodge sewage disposal works. Sandford Fawcett & Partners, engineers, 53, Victoria-st., Westminster. Dep. £10 10s.
Irwell Valley Water Board.—Elevated water tower at Starling, near Bury. Engineer and Manager to Board, Parsons-la., Bury. Dep. £2.
Watford T.C.—Pumping station and softening works at waterworks, The Grove, Hemel Hempstead-rd. W. W. Newman, B.E. Dep. £5 5s.
Worcestershire C.C.—Reconstruction of Forge Bridge, Halesowen. B. C Hammond, C.S. and Bridgemaster, Worcester. Dep. £2 2s.

MARCH 18.

Dawlish U.D.C.—Contract No. 2 for water supply. Lemon & Blizard, engineers, 24, Lockyer-st., Plymouth. Dep. £5 5s.
Somerset C.C.—Rebuilding Mudford bridge and relief arches, on Yeovil-Frome-rd. County S., County Hall, Taunton. Dep. £5.
Staffordshire C.C.—Widening of Watling-st. canal bridge, Fazeley. C.S., Stafford. Dep. £5.

MARCH 20.

Frome R.D.C.—Sewers and sewage disposal works, in Rode. Parker, Pearson & Ross Hooper, engineers, Dallas-chambs., Chippenham. Dep. £2.

MARCH 21.

Bognor Regis U.D.C.—2,300 yds. of cast-iron pipe sewers and pumping main, pumping station, etc., and other appurtenant works. D. Balfour & Sons, consulting engineers, 47, Victoria-st., Westminster, S.W.1. Dep. £5.
Buckingham R.D.C.—Sewerage and sewage disposal. D. Balfour & Sons, consulting engineers, 47, Victoria-st., Westminster, S.W.1. Dep. £5.
Cardiff T.C.—Dismantling and re-erecting on prepared foundations steel-framed aeroplane hangar and other appurtenant works at Cardiff Aerodrome. Geo. H. Whittaker, City E.
Chingford T.C.—Improvements to A.R.P. trenches at various sites. B.E. & S., Dep. £1 1s.
New Mills U.D.C.—Alterations and extensions to sewage disposal works. J. A. Thompson, S. Dep. £2 2s.
Perth and Kinross C.C.s.—New bridges and road diversion at Dunblane, on London-Edinburgh-Thurso trunk road. Blyth & Blyth, civil engineers, 135, George-st., Edinburgh. Dep. £10 10s.
Teignmouth U.D.C.—Contract No. 3 for Teignmouth main drainage. F. W. S. Stanton, E., 5, Victoria-st., Westminster, S.W.1. E. Gardner Thorp, E. and S., Teignmouth. Dep. £5.

ROAD, SEWERAGE AND WATER WORKS.

MARCH 15.

Cheltenham T.C.—Main drainage schemes for Chelt trunk sewer, Rowanfield sewer and Wyman's Brok sewer. G. Gould Marsland, B. and Water E. Dep. £1 1s.
Hertfordshire C.C.—Supplying and laying two-coat asphaltic carpet work. A. E. Prescott, C.S., Hatfield.
Middlesex C.C.—Construction of roundabout and pedestrian subway at junction of Barnet By-pass, Watford By-pass and Page-st., Hendon. C.S., 10, Great George-st., S.W.1. Dep. £3 3s.
Monmouthshire C.C.—Macadam and asphaltic cement carpet to Newport-Chepstow trunk road and Newport-Bedwas-rd. S. A. Bennett, County S.
Wembley T.C.—Children's playground at Manor Farm housing estate, Alperton. Borough Treasurer, 117a, High-rd., Wembley. Dep. £1 1s.

MARCH 16.

Carlisle T.C.—Clearing, levelling, consolidating and preparation of approx. 60 acres of land at Kingstown Airport. City E., 18, Fisher-st. Dep. £2 2s.
Doncaster C.B.—Reconstruction of roads at Springwell House, Balby. B.E., 2, Priory-pl
Ealing T.C.—Surfacing carriageway of Boston-rd. C. W. Seddon, B.E. Dep. £2 2s.
Morley T.C.—Six new streets on the Fairfax housing estate. B.E. Dep. £2 2s.
Peterborough T.C.—Reconstruction of Dogsthorpe-rd. City E. Dep. £2.

MARCH 18.

Burgess Hill U.D.C.—Widening and reconstruction of Valebridge-rd. F. E. R. Hogg, E. and S. Dep. £3 3s.
Eccles T.C.—Making-up of Beaufort-st., Winton B.S.
Loughborough T.C.—Main sewer in Derby-rd. W. Granger, B.E.
Lytham St. Annes T.C.—Main sewer from Heyhouses-ln. to Bartle-rd., adjoining Shepherd-rd. housing estate. B.E. and S.
Manchester T.C.—Supplying approximately 5,300 tons of hot rolled asphalt for surfacing various streets, and draining, kerbing, flagging, Middlegate, Moston, North Cres., Moston, and South-cres., Moston. Highways Dept. (District Surveyor's Office), Town Hall, Manchester, 2. Dep. £1 1s.
Newark R.D.C.—Making of footways at Belvoir-rd., Balderton. R. Oakden, S.
Wenlock T.C.—Maintenance and repair of roads. B.S.

MARCH 20.

Belfast C.B.—Sewer extension, Sandown-rd., and sewer reconstruction, Inver-av. to Tokio-gdns. City Surveyor's Dept.
Billericay U.D.C.—Making-up of Samuel-rd., Langdon Hills. H. B. Mayhew, S. Dep. £2 2s.
Epsom and Ewell T.C.—Improvement of Chessington-rd., West Ewell. Norman Auty, B.E. and S. Dep. £2 2s.
Halifax C.B.—Making-up Iona-st. and adjoining streets, Rocks-rd. D. T. Lloyd Jones, B.E., Crossley-st. Dep. £2 2s.
Harrow U.D.C.—Drainage works at Wealdstone. H. W. Rackham, E. and S. Dep. £2 2s.

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and our technical representative are sent free. We guarantee success. Much specified by municipal authorities.
P. C. HENDERSON LTD., BARKING, ESSEX
Telephone: RIPPLEWAY 3406 (Prvt. Branch Ex.).

Mablethorpe and Sutton U.D.C.—Reconstruction of Wellington-rd. and Waterloo-rd. A. E. Baker, E. and S. Dep. £1 1s. each.
Mablethorpe and Sutton U.D.C.—Making-up of Queen's-rd., Sutton-on-Sea, and Braemar-rd., Sutton-on-Sea. A. E. Baker, E. and S. Dep. £1 1s. each.
Manchester Corporation.—1,350 yds. of 24-in. and, alternatively, 30-in. socket and spigot water pipes and special castings. Secretary, Waterworks Offices.
Port Talbot T.C.—Roads and sewers for seven schemes. B.S.

MARCH 21.

Brentford and Chiswick T.C.—Construction of roads and sewers on new housing estate at Edensor-rd., Chiswick. L. A. Cooper, B.E. and S. Dep. £5 5s.
Newhaven U.D.C.—Making-up of Back-st. between Eastbridge-rd. and Norton-ter. S. Dep. £2.
Romford T.C.—15,500 sq. yds. of paved footways at Jutsum's-ln., Wallenger-av., Castellan-av., Marlborough-rd., Essex-rd., Woodstock-av., Upper Brentwood-rd. and Southern-way. B.E. Dep. £2 2s.
Staines U.D.C.—Making-up of Gables-av., Ashford. D. C. Fidler, E. and S.

Public Appointments.

MARCH 13.

London.—Assistant Civil Engineers. Under-Secretary of State, Air Ministry, Adastral House, Kingsway, W.C.2.
London.—Draughtsmen (Temp.). Chief Superintendent of Ordnance Factories (Advt. No. 254), Royal Arsenal, Woolwich, S.E.18.
Portsmouth T.C.—Clerk of Works. T.C.

MARCH 14.

Chester C.C.—Clerk of Works. F. Anstead Browne (F.), Chester.
Hertfordshire.—Architectural Assistants (two). City S. and Architect, Hatfield.
Norfolk C.C.—Clerk of Works. County Architect, 25, Thorpe-rd., Norwich.

MARCH 15.

Bexhill T.C.—Architectural Assistant. T.C.
Bristol T.C.—Deputy City Architect. J. Nelson Meredity (F.), Eagle-hse., Colston-av.
***Folkestone.**—Architectural and Civil Engineering Assistant (Temp.). D.C.R.E., R.E. Office, Shorncliffe Camp.
Gateshead C.B.—General Clerk of Works. B.E.
Islington B.C.—Chief Engineering Assistant, B.E. and S., Town Hall, Upper-st., N.1.
London.—Design Masters. Director of Education, The Polytechnic, Regent-st., W.1.
***Tottenham T.C.**—Architectural Assistant. B.E. and S.

MARCH 16.

***Exeter T.C.**—Architectural Assistant. John Bennett (F.), City Architect.
Glamorgan C.C.—Architectural Assistant (Temp.). County Architect, Cardiff.
Liverpool T.C.—Inspector of Works. T.C.

MARCH 17.

***Stafford T.C.**—Clerk of Works. B.E.
***Swansea C.B.**—Assistant Quantity Surveyor. T.C.
West Ham C.B.—General Foreman. B.E.

MARCH 18.

***Leeds T.C.**—Surveying Assistant. R. A. H. Livett (A.).
***Sheerness U.D.C.**—Clerk of Works. E. and S.
***Wolverhampton C.B.**—Architectural Assistants (Temp.). T.C.

MARCH 20.

***Brentford and Chiswick B.C.**—Junior Engineering Assistant. L. A. Cooper (L.).
***Brentford and Chiswick B.C.**—Surveying Assistant (Temp.). L. A. Cooper (L.). B.E. and S.
***London.**—Assistant Quantity Surveyors. Under-Secretary for Mines, Establishment Branch, Dean Stanley-st., S.W.1.
***London.**—Technical Assistants. Chief Superintendent of Ordnance Factories (Advt. No. 257), Royal Arsenal, Woolwich, S.E.18.
***London.**—Quantity Surveyor (Temp.). Chief Superintendent (Advt. No. 258), Royal Arsenal, S.E.18.
***London.**—Works Services Clerks. Chief Superintendent, Ordnance Factories (Advt. 256), Royal Arsenal, S.E.18.
***Northampton C.B.** — Architectural Assistant (Temp.). H. C. Perrin.

MARCH 21.

***Stoke-on-Trent T.C.**—Assistant Quantity Surveyor. T.C.

MARCH 22.

***London County Council.**—Visiting Teacher, Hammersmith School. Education Officer (T.1), County Hall, S.E.1.

MARCH 24.

***Bootle C.B.**—Quantity Surveyor. B.E. and S.

NO DATE.

***Durham C.C.** — Architectural Assistant. F. Willey (F.), 34, Old Elvet, Durham.
London.—Master, by Government of Gold Coast. Crown Agents for the Colonies, 4, Millbank, S.W.1, quoting M/8300.
***London.**—Assistants. Under-Secretary of State, Air Ministry (W.9), Adastral House.
***London.**—Assistant Quantity Surveyors. Civil Engineer-in-Chief, Admiralty.
***London.**—Civil Engineering Assistants and Architectural Assistants (Temp.). Civil Engineer-in-Chief, Admiralty.
***London.**—Structural Engineering Assistants. Under-Secretary of State (C.5), War Office, S.W.1.
***Perth.**—Architectural and Civil Engineering Assistant. C.R.E., Highland Area Headquarters, Craigie.
***Starcross.**—Clerk of Works (Temp.). Secretary, The Royal Western Counties Institution.

CURRENT AND PROPOSED BUILDING WORK*

The Editor welcomes authentic information for this feature from architects, surveyors or contractors. Where business representatives cannot be seen personally at this stage, this should be mentioned. Items should reach 4, Catherine-street, Aldwych, W.C.2, not later than Wednesday morning.

Altrincham.—Committee of Management of General Hospital propose hospital off Woodcote-rd.

Barnsley.—Whitworth, Son & Nephew, Ltd., The Brewery, Wath-on-Dearne, propose rebuilding "Three Horse Shoes" hotel, High-st., Wombwell. Architects, Wilburn & Atkinson, 11, South-parade, Doncaster.

Barrow-in-Furness.—T.C. approved: 27 houses, nr. Jesmond-av., A. Peet.

Basingstoke.—T.C. approved development off Sherborne-rd. of 53 houses and 2 shops for Monk & Cox, builders, Wrecclesham-hill, Farnham.

Bebington.—Peter Walker & Son, Warrington & Burton, Ltd., 105, Duke-st., Liverpool, propose hotel, Spital Cross-rd. Cost, £15,800. Architect, A. E. Shennan (F.), North House, 17, North John-st., Liverpool.

Birmingham.—G.W.R. proposes to build at Snow Hill Station six-floor steel-framed structure hotel, fronting on Colmore-row.

Birmingham.—Holt Brewery, Ltd., Holt-st., Aston, propose rebuilding "Old Union Inn," Holt-st. Plans by O. M. Weller, staff architect.—It is proposed to erect gymnasium at £15,000 and ancillary rooms, three squash courts and a fives court at Birmingham University at Selly Oak. Architects for gymnasium, Peacock & Bewlay, 83, Colmore-row.

Birmingham.—J. B. Surman (F.), 19, Cannon-st., preparing plans for rebuilding "Talbot" Hotel, Moat-ln., for Holt Brewery Co., Ltd., Aston Brewery.

Bishop Auckland.—P. L. Browne, Son & Harding, Pearl-bldgs., Northumberland-st., Newcastle-on-Tyne, architects for factory on St. Helen's estate, for North-Eastern Trading Estates, Ltd., Gateshead.

Blackpool.—New £5,000 building for Blackpool Boys' Club proposed. Architects, Derham, Mac-Keith & Partners.

Blackpool.—T.C. suggested that in development of large plot of land known as Pembroke estate, on the North Promenade, a planetarium should be provided, at £60,000.

Braintree.—Plans prepared by J. O'Hanlon Hughes (F.), for Roman Catholic church

Brighouse.—W. F. Dawson, F.R.I.B.A., 129, Albion-rd., Leeds, architect for offices at Woodhouse works, for J. Blakeborough & Sons, Ltd.—G. & G. H. Crowther, surveyors, 1, Princess-st., Huddersfield, preparing plans for 127 houses, Slade-la., Crowtrees-la. and Green-la., Brighouse, for Thornhill Yorkshire Estates, Ltd., 1, Princess-st., Huddersfield.

Brighouse.—J. Jagger & Sons, Ltd., builders, Bailiffe Bridge, propose housing estate, Huddersfield-rd.

Bromsgrove.—Ansells Brewery Co., Ltd., Park-rd., Aston, Birmingham, making application to Licensing Justices for licence for proposed premises to be erected corner of Broad-st. and Stourbridge.—Licensing Justices approved application of Ansells Brewery Co., Ltd., for licensed premises corner of Grovelly-ln. and Longbridge-ln., Cofton Hackett, at £10,000 to £11,000.

Buxton.—Detailed plans and quantities to be prepared for extensions to Devonshire Royal Hospital, at £35,000, for Board of Management. Architects, Thomas Worthington & Sons (F.), 178, Oxford-rd., Manchester.

Caernarvon.—Board of Governors of the County School propose gymnasium and shower baths. Plans by County Architect, W. L. Jones, Shirehall-st., Caernarvon.

Cannock.—R.D.C. approved: working men's club in Walsall-rd., Great Wyrley, Great Wyrley Working Men's Club.

Carlisle.—Board of Management of Cumberland Infirmary proposes to invite tenders for operating rooms at Infirmary. Plans by S. B. W. Jack, 35, Warwick-rd., Carlisle.

Cheddar.—Managers of Cheddar Church of England senior school propose to enlarge school to provide accommodation for additional 100 senior children.

Chelmsford.—T.C. approved: E. S. Legg, development of new estate and 36 houses between Baddow-rd. and Van Diemans-la.; Crompton Parkinson Sports Club, squash rackets court, Sports Ground, Wood-st.

Corby.—W. Everard & Co., brewers, Southgate-st., Leicester, propose hotel, junction of Occupation-rd. and Cottingham-rd. Architects, Gotch, Saunders & Surridge, High-st., Kettering.

Corby (Northants).—Stewart & Lloyds, Ltd., Iron Works proposes 40 garages, Kelvin-gr., West Glebe-rd., Hazelwood-rd., and Rollett-rd.

Cowes (I. of W.).—Plans passed:—14 semi-detached houses and 24 semi-detached bungalows, new road off Park-rd., New Ideal Homesteads, Ltd.

Doncaster.—Rev. W. J. Parker and Parochial Council, Parish Church, Intake, proposes church to seat 416, at £7,000. Architects, Walker & Thompson, Carbon-chambs., Doncaster.

Essex.—Approval of Ministry of Agriculture been received by River Roding Catchment Board concerning Board's new £40,000 flood prevention scheme along both banks of Roding between Ilford and Chigwell.

Garforth.—U.D.C. approved: Layout of 30 houses by D. Sherbun, adjoining Church-la.; layout of 59 houses by Suprema Industries, Ltd., off Wakefield-rd.

Gosforth.—Local company intends to build ice skating rink. Hetherington & Wilson, County-chambs., Newcastle, architects.

Halifax.—Industrial Society, Ltd., Northgate, proposes modernisation of branch at Law-ln. and Cain-ln., Southowram.

Hook.—Timber-framed pavilion for King's College School Old Boys' Sports Club, Ltd., to be erected at Clayton-rd. to plans prepared by P. A. W. Roffey (F.), 1, Putney-hill, S.W.15. No contracts placed.

Huddersfield.—St. Barnabas' Church members propose parish hall and Sunday-school, Gramfield-rd., Croslandmoor. Architects, Lunn, Heppenstall & Lunn, 3, Station-rd., Milnsbridge.—R.C. Authorities propose Catholic senior school for 360 scholars. Cost, £43,000. Architect, G. Crossley (A.), Education Architect., Eudcation Offices, Peel-st., Huddersfield. Quantity surveyors, Hobson & Withington, 45, Clifton-st., Manchester, 13. Tenders to be invited.

Ilkley.—Board of Management of Ilkley Coronation Cottage Hospital (Sec., L. Hartley, Ilkley) propose hospital building, at £35,000. Architect, A. Harold Watson (F.), 2, Barstow-sq., Wakefield

Jarrow-on-Tyne.—Plans by G. C. Young, 12, Grange-rd., West Jarrow, for converting old police station in High-st. into small meats dept. for Jarrow & Hebburn Co-op. Society approved.—E. M. Lawson (A.), Barras-bldgs., Barras Bridge, Newcastle-on-Tyne, prepared plan for hotel in Springwell-rd.

Leamington Spa.—Rev. F. W. Stanbridge, P.P. of St. Peter's, Dormer-pl., proposes reconstruction of Augusta-pl. girls' and infants' school. Architect, E. Bower Norris (F.), 134, Newport-rd., Stafford.

Leamington.—T.C. approved 29 detached houses with garages on road No. 1, Village Farm estate, Lillington, Lewis & Watters.

Leeds.—Borrowing sanctions received by Corporation of £136,900 for flats in Sweet-st. area; £100,000 for buildings at Kirkstall power station; £20,468 for new heating and hot water services at St. James's Hospital and North Lodge.

Leicester.—For £50,000 ice rink and sports arena adjoining Agricultural Society's show ground, plans been approved by Town Planning Committee of City Council.

Liverpool.—E.C. agreed to recommend City Council to approve pavilion, etc., at Holly Lodge High school, at £1,056.

London.—L.C.C. sanctioned borrowing by Bermondsey B.C. of £3,099 for housing; by Greenwich B.C. of £4,000, for electric lighting on council's housing estate; and by Holborn B.C. of £20,030, for Dombey-st. housing.

Long Eaton.—Taylor, Son & Mundy, architects, 23, King-st., Nottingham, for rebuilding "Victoria Inn."

Middlesbrough.—Members of Middlesbrough Motor Club propose headquarters, Clarendon-rd. Plans by Archibald & Archibald, 23-5, Albert-rd.

Morecambe.—G. S. Oldham, 32, Claremont-rd., prepared plans for floral hall and ballroom, Marine-rd., for Empire Theatre (Morecambe), Ltd. Cost, £100,000.

Morley.—T.C. approved plans: Sunday-school, West Ardsley, Rehoboth Church Trustees.

Morpeth.—No contracts yet placed for extensions to Morpeth Cottage Hospital. Architect, C. F. Murphy, Newgate-st.

Newcastle-on-Tyne.—Northern District of the Incorporated Seamen's and Boatmen's Friendly Society obtained site in City-rd. for headquarters.—Christian Science Church to be built in Osborne-rd. A. Fennell & Co., 16, West-st., Gateshead-on-Tyne, architects.—Works to be built for Burma Engineering Co., Ltd., Boyd-st. R. Burke, Singleton House, architect.—Plans by W. Riddle, 53, Denham-ter., Wallsend-on-Tyne, approved for workshop and offices at premises of Heaton Foundry Co., Heaton Junction.

Northallerton.—Highways and Bridges Committee will recommend to North Riding C.C. that new county depot be built on Boroughbridge-rd., Northallerton, at £8,325.

Northumberland.—Northumberland Aged Miners' Homes' Association to demolish 30 houses on its Longhirst estate and erect fresh houses for tenants.

Nottingham.—Home Brewery Co., Ltd., Daybrook Brewery, proposes hotel, Oxclose-ln., Arnold. Architect, E. Cecil Howitt (F.). St. Andrew's House, Mansfield-rd., Mapperley-rd. Corner.

Nottingham.—W. B. Starr & Hall, architects, 12, Victoria-st., for hotel, Sneinton Hollows and Thurgarton-st., for T. S. Pashley.

Paignton.—Drury & Tonar, 16, Bedford-circus, Exeter, architects for Church of St. Michael's.

Redditch.—Holding & Sons, builders, Cobb-la., Bournville, Birmingham, propose shopping centre, Birmingham-rd.

Rhyl.—F. W. Woolworth & Co., Ltd., 1, New Bond-st., London, W.1, propose premises for bazaar emporium on site of Cinema Royal. Plans by staff architect, B. C. Donaldson, 1, New Bond-st., London, W.1.

Rugby.—Board of Management of Hospital of St. Cross proposing block, at £5,250. Architect, W. T. Loveday (L.), 2a, Lawrence Sherriff-st., Rugby.

Ruislip-Northwood.—R.D.C. approved: Amended layout of land off Southbourne-gdns., Eastcote, F. Evans; 35 pairs semi-detached houses, Long-dr., South Ruislip, Jacksons; six shops and flats overhead, Whitby-rd., Eastcote, Onoff Sites, Ltd.

Sedgefield.—Plans by Matkin & Hawkins, Barclays Bank-chambs., Sunderland, for rebuilding of "Bee Hive" hotel for Robinson & Co., Houghton-le-Spring.

Sheffield.—Local branch of Boys' Scouts propose saleshops, offices, committee rooms and assembly hall, Trippett-ln. Architect, J. Mansell Jenkinson, 18, Norfolk-row.—Lanchester, Lodge & Davis (FF.), 19, Bedford-sq., London, W.C.1, prepared plans for second section extensions to Sheffield University at Western Bank, for Senate.

South Shields.—Howard Hill, Winchester-st., prepared plans for offices and other alterations in Thrift-st., for Tyne Dock Eng. Co., Ltd.

Southgate.—T.C. approved: Additions to Vestry, St. John's Church, Green Lanes, N.13, C. M. Oldrid Scott, 19, Queen Anne's-gate, S.W.1.

Stafford.—Rev. E. N. Thomas, Vicar, and Parochial Council of St. John's, Littleworth, propose additions to church, at £4,600. Architect, Sir C. A. Nicholson (F.), 2, New-sq., Lincoln's Inn, W.C.2.

Staffordshire.—Territorial Army Association, Market-sq., Stafford, proposing drill hall at Bloxwich.

Stratford-on-Avon.—T.C. approved preliminary plans for a block of flats, three stories high, in Waterside, from Sheep-st. to County Garage, for —. Dussault.

Sunderland.—Plans by Stephenson & Gillis, Saville-pl., Newcastle, for machine shop for Bernstein Bros., in Strand-st.

Sutton Coldfield.—Application to be made to M.H. for consent to borrowing £57,130 for proposed Holland-rd. senior Council school.

Sutton Coldfield.—Ansells Brewery Co., Ltd., Park-rd., Aston, Birmingham, propose to reconstruct "Hare and Hounds" at Minworth.

Theale (Berks).—Imperial Tobacco Co. (of Great Britain and Ireland), Ltd., entered into a contract for purchase of about 20 acres of land for use as factory site.

Walsall.—L.M.S. Railway propose reconstruction of railway bridges at Wallows-ln., Birchills Station and Forest-ln.

Widnes.—T.C. approved: Bank premises, Victoria-rd. and Chapel-st., for Martins Bank, Ltd.; offices, Earle-st., for Britannia Scrap Metal Co., Ltd.

Winchester.—R.D.C. approved: extension to factory, Hamble, Folland Aircraft, Ltd.; nine pairs of houses, Valentine-av., Hound, A. G. Roxburgh, S.

Windsor.—E.C. approved tenders for extensions to Clarence-rd., the Royal Free and St. Stephen's girls' schools. Total cost of tenders over £27,000.

Wisbech.—T.C. approved: West-st., lock-up shop and showroom, E. Neil Carruthers, Ltd.

Workington.—R. & R. H. Radcliffe, Radcliffe's Buildings, 37, Moorfields, Liverpool, propose block of 12 shops, Pow-st., to own plans.

*See also List of Contracts Open.

**** In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. List of abbreviations on page 497.**

Just a scrub .... a rinse and the work has dried quickly ready for paint.

The quick and efficient way in which "Manger's" cleans all paintwork is greatly appreciated by Decorators.

Quicker final drying, non-greasy finish; consistent quality and strength are further points in favour of "Manger's"; also its specially lined fit-the-pocket carton.

Varnished paper, French polish, etc., can be stripped much more easily and considerably cheaper by using a strong solution of "Manger's."

Prove its excellence at our expense. Send for free sample.

4½d. ea.—1 doz. at 4½d.
3 doz. at 4d.

Send for FREE SAMPLE now, to:
J. MANGER & SON, LTD.
Dept. B.1., Kingsland, London, E.8.

B4

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st FEBRUARY, 1939

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors]

	Crafts-men.	Lab-ourers.
Aberavon	1/7½	1/2½
Aberdare	1/7½	1/2½
Abergavenny	1/7	1/2½
Abingdon	1/6	1/1½
Accrington	1/7½	1/2½
Aldeburgh	1/4	1/0
Aldershot	1/5½	1/1½
Alfreton	1/7½	1/2½
Alnwick	1/7	1/2½
Altrincham	1/7½	1/2½
Amble	1/7	1/2½
Amersham	1/6	1/1½
Ammanford	1/7½	1/2½
Andover	1/5½	1/1½
Ardingley	1/5½	1/1½
Arundel	1/5½	1/1½
Ascot	1/5½	1/1½
Ashby-de-la-Zouch	1/6	1/1½
Ashford (Kent)	1/5½	1/1½
Ashford(Middlesex)	1/7½	1/2½
Ashington	1/7	1/2½
Ashtead	1/7½	1/2½
Ashton-under-Lyme	1/7½	1/2½
Aylesbury	1/5½	1/1½
Aylsham	1/4½	1/0½
Bagshot	1/5½	1/1½
Banbury	1/5½	1/1½
Barnsley	1/7½	1/2½
Barnstaple	1/5½	1/1½
Barrow-in-Furness	1/7½	1/2½
Barry	1/7½	1/2½
Basingstoke	1/5½	1/1½
Bath	1/7	1/2½
Batley	1/7½	1/2½
Beaconsfield	1/6	1/1½
Beccles	1/4	1/0
Bedford	1/7	1/2½
Berkhamsted	1/5½	1/1½
Berwick	1/7	1/2½
Beverley	1/7½	1/2½
Bexhill-on-Sea	1/6	1/1½
Bideford	1/5½	1/1½
Biggleswade	1/5	1/0½
Billericay	1/5	1/0½
Birchington	1/5½	1/1½
Birkenhead	‡§1/10	¶
Birmingham	1/7½	1/2½
Bishop Auckland	1/7½	1/2½
Bishops Stortford	1/6½	1/2
Blackburn	1/7½	1/2½
Blackpool	1/7½	1/2½
Blyth	1/7½	1/2½
Bognor Regis	1/5½	1/1½
Bolton	1/7½	1/2½
Bournemouth	1/6½	1/2
Bracknell	1/5½	1/1½
Bradford	1/7½	1/2½
Bradford-on-Avon	1/4½*	1/0½
Braintree	1/5½	1/1½
Brentwood	1/7	1/2½
Bridgwater	1/6	1/1½
Bridlington	1/7	1/2½
Brighouse	1/7½	1/2½
Brighton	1/6½	1/2
Bristol	1/7½	1/2½
Broadstairs	1/5½	1/1½
Bromsgrove	1/7	1/2½
Buckley	1/7½	1/2½
Bungay	1/3½	11½
Burnham-on-Crouch	1/4	1/0
Burnley	1/7½	1/2½
Burslem	1/7½	1/2½
Burton-on-Trent	1/7½	1/2½
Bury	1/7½	1/2½
Bury St. Edmunds	1/5	1/0½
Buxton	1/7	1/2½
Byfleet	1/6	1/1½
Cambridge	1/7	1/2½
Canterbury	1/5½	1/1½
Cardiff	1/7½	1/2½
Carlisle	1/7½	1/2½
Carnforth	1/7½	1/2½
Castleford	1/7½	1/2½
Caterham	1/7½	1/2½
Chard	1/4½*	1/0½
Chatham	1/6½	1/2
Chelmsford	1/7	1/2½
Cheltenham	1/6½	1/2
Chepstow	1/6½	1/2
Chertsey	1/6½	1/2
Chester	1/7½	1/2½
Chesterfield	1/7½	1/2½
Chichester	1/5½	1/1½
Chorley	1/7½	1/2½
Cirencester	1/5*	1/0½
Clacton	1/5½	1/1½
Cleveleys	1/7½	1/2½
Clitheroe	1/7½	1/2½
Cobham (Surrey)	1/6½	1/2
Colchester	1/7	1/2½
Colwyn Bay	1/6½	1/2
Congleton	1/7	1/2½
Coventry	1/7½	1/2½
Cranbrook	1/5½	1/1½
Cranleigh	1/5½	1/1½
Crawley	1/5½	1/1½
Crewe	1/7	1/2½
Cromer	1/4½	1/0½
Crowborough	1/5½	1/1½
Cuckfield	1/5½	1/1½
Darlington	1/7½	1/2½
Darwen	1/7½	1/2½
Daventry	1/6	1/1½
Deal	1/5½	1/1½
Denbigh	1/6	1/1½
Derby	1/7½	1/2½
Devizes	1/4*	1/0
Dewsbury	1/7½	1/2½
Didcot	1/5½	1/1½
Diss	1/4	1/0
Doncaster	1/7½	1/2½
Dorchester	1/5*	1/0½
Dorking	1/6	1/1½
Dover	1/5½	1/1½
Dovercourt	1/5½	1/1½
Driffield	1/6	1/1½
Droitwich	1/7	1/2½
Dudley	1/7	1/2½
Dunstable	1/6	1/1½
Durham City	1/7½	1/2½
Eastbourne	1/6½	1/2
E. Glam. (Mon. Val.)	1/7½	1/2½
East Grinstead	1/5½	1/1½
Edenbridge	1/5½	1/1½
Ely	1/4	1/0
Epping	1/7½	1/2½
Exeter	1/7†	1/2½
Exmouth	1/6	1/1½
Fakenham	1/4½	1/0½
Falmouth	1/6	1/1½
Fareham	1/6½	1/2
Faversham	1/5½	1/1½
Felixstowe	1/6½	1/2
Filey	1/6	1/1½
Fleetwood	1/7½	1/2½
Flint	1/7½	1/2½
Folkestone	1/5½	1/1½
Frinton-on-Sea	1/5½	1/1½
Frome	1/4½*	1/0½
Gainsborough	1/6½	1/2
Gateshead	1/7½	1/2½
Gillingham (Kent)	1/6½	1/2
Glossop	1/7½	1/2½
Gloucester	1/7†	1/2½
Godalming	1/5½	1/1½
Goole	1/7½	1/2½
Gosport	1/7	1/2½
Grantham	1/6½	1/2
Gravesend	1/7	1/2½
Great Yarmouth	1/5½	1/1½
Grimsby	1/7½	1/2½
Guildford	1/5½	1/1½
Guilsborough	1/6	1/1½
Halifax	1/7½	1/2½
Hanley	1/7½	1/2½
Harpenden	1/6½	1/2
Harrogate	1/7½	1/2½
Hartlepools	1/7½	1/2½
Harwich	1/5½	1/1½
Haslemere	1/5½	1/1½
Hastings	1/5½	1/1½
Hatfield	1/7	1/2½
Haywards Heath	1/5½	1/1½
Hednesford	1/7	1/2½
Hemel Hempstead	1/6½	1/2
Henley-on-Thames	1/5½	1/1½
Hereford	1/5½*	1/1½
Herne Bay	1/5½	1/1½
Hertford	1/7	1/2½
Heysham	1/7½	1/2½
Hitchin	1/6	1/1½
Hoddesdon	1/7	1/2½
Holt (Norfolk)	1/4	1/0
Horley	1/5½	1/1½
Horsham	1/5½	1/1½
Horwich	1/7½	1/2½
Huddersfield	1/7½	1/2½
Hull	1/7½	1/2½
Hunstanton	1/4½	1/0½
Huntingdon	1/5	1/0½
Ilfracombe	1/5½	1/1½
Ingatestone	1/6	1/1½
Ipswich	1/7	1/2½
Isle of Thanet	1/5½	1/1½
Isle of Wight	1/4½	1/0½
Keighley	1/7½	1/2½
Kenilworth	1/7½	1/2½
Kettering	1/7	1/2½
Kidderminster	1/7	1/2½
King's Lynn	1/5½	1/1½
Kirkham	1/7½	1/2½
Knowle	1/7	1/2½
Lancaster	1/7½	1/2½
Leamington	1/7½	1/2½
Leatherhead	1/6½	1/2
Leeds	1/7½	1/2½
Leicester	1/7½	1/2½
Leighton Buzzard	1/4½	1/0½
Letchworth	1/6	1/1½
Lewes	1/5½	1/1½
Lichfield	1/6½	1/2
Lincoln	1/7½	1/2½
Littlehampton	1/5½	1/1½
Liverpool	‡§1/10	¶
Llandudno	1/6½	1/2
Llanelly	1/7½	1/2½
London—		
12 m. radius	1/9*	1/3½
12-15 m. radius	1/8½*	1/3½
Long Eaton	1/7½	1/2½
Longton	1/7½	1/2½
Loughborough	1/7½	1/2½
Louth	1/6	1/1½
Lowestoft	1/5½	1/1½
Luton	1/7	1/2½
Macclesfield	1/7	1/2½
Maidenhead	1/6	1/1½
Maidstone	1/6	1/1½
Malvern	1/6	1/1½
Manchester	1/7½	1/2½
Manningtree	1/4½	1/0½
Mansfield	1/7½	1/2½
March	1/4½	1/0½
Margate	1/5½	1/1½
Market Harborough	1/6½	1/2
Matlock	1/6	1/1½
Melton Constable	1/4	1/0
Melton Mowbray	1/6½	1/2
Merthyr	1/7½	1/2½
Middlesbrough	1/7½	1/2½
Middleton	1/7½	1/2½
Middlewich	1/7	1/2½
Milford Haven	1/6	1/1½
Morecambe	1/7½	1/2½
Morley	1/7½	1/2½
Mundesley	1/4½	1/0½
Nantwich	1/7	1/2½
Nelson	1/7½	1/2½
Newark-on-Trent	1/7	1/2½
Newbury	1/5½	1/1½
Newcastle-on-Tyne	1/7½	1/2½
Newcastle-u-Lyme	1/7½	1/2½
New Forest	1/4½	1/0½
Newmarket	1/5½	1/1½
Newport, Mon.	1/7½	1/2½
Newport Pagnell	1/5½	1/1½
Northampton	1/7½	1/2½
Norwich	1/7½	1/2½
Nottingham	1/7½	1/2½
Nuneaton	1/7½	1/2½
Oakham	1/6	1/1½
Oldham	1/7½	1/2½
Ormskirk	1/7½	1/2½
Oxford	1/7	1/2½
Oxted	1/6	1/1½
Paignton	1/7	1/2½
Peterborough	1/7	1/2½
Plymouth	1/7½	1/2½
Pontefract	1/7½	1/2½
Pontypridd	1/7½	1/2½
Port Talbot	1/7½	1/2½
Portsmouth	1/7	1/2½
Preston	1/7½	1/2½
Pulborough	1/5½	1/1½
Ramsgate	1/5½	1/1½
Reading	1/7	1/2½
Redditch (Northern)	1/6½	1/2
Redhill	1/6	1/1½
Ripon	1/6	1/1½
Rochdale	1/7½	1/2½
Rochester	1/6½	1/2
Rugby	1/7½	1/2½
Saffron Walden	1/4½	1/0½
St. Albans	1/7	1/2½
St. Helens	1/7½	1/2½
St. Neots	1/4½	1/0½
Salisbury City	1/4½*	1/0½
Salisbury Plain	1/5½*	1/1½
Sawbridgeworth	1/6	1/1½
Saxmundham	1/4	1/0
Scarborough	1/7	1/2½
Scunthorpe	1/7½	1/2½
Selby	1/7½	1/2½
Sevenoaks	1/6	1/1½
Sheerness	1/5	1/0½
Sheffield	1/7½	1/2½
Shipley	1/7½	1/2½
Shoeburyness	1/7	1/2½
Shoreham	1/6½	1/2
Shrewsbury	1/6½	1/2
Sittingbourne	1/5½	1/1½
Skegness	1/6½	1/2
Sleaford	1/6	1/1½
Slough	1/6½	1/2
Southampton	1/7	1/2½
Southend-on-Sea	1/7	1/2½
Southport	1/7½	1/2½
South Shields	1/7½	1/2½
Spalding	1/5½	1/1½
Stafford	1/7	1/2½
Staines	1/6½	1/2
Stamford	1/6½	1/2
Stevenage	1/6	1/1½
Stockport	1/7½	1/2½
Stockton-on-Tees	1/7½	1/2½
Stoke-on-Trent	1/7½	1/2½
Stourbridge	1/7	1/2½
Stourport	1/7	1/2½
Stowmarket	1/4½	1/0½
Stratford-on-Avon	1/6½	1/2
Stroud	1/6†	1/1½
Sunderland	1/7½	1/2½
Sutton Coldfield	1/7½	1/2½
Swaffham	1/4	1/0
Swanage	1/5½*	1/1½
Swansea	1/7½	1/2½
Swindon	1/6*	1/1½
Tamworth	1/7	1/2½
Taunton	1/5½	1/1½
Tenterden	1/5½	1/1½
Thames Haven	1/7½	1/2½
Thetford	1/5	1/0½
Thorpe Bay	1/7	1/2½
Todmorden	1/7½	1/2½
Tonbridge	1/6	1/1½
Torquay	1/7	1/2½
Totnes	1/5½	1/1½
Trowbridge	1/4½*	1/0½
Truro	1/4½	1/0½
Tunbridge Wells	1/6	1/1½
Uppingham	1/6	1/1½
Uttoxeter	1/6	1/1½
Wakefield	1/7½	1/2½
Walsall	1/7½	1/2½
Walsden	1/7½	1/2½
Walton-on-Naze	1/5½	1/1½
Ware	1/7	1/2½
Warminster	1/4½*	1/0½
Warrington	1/7½	1/2½
Warwick	1/7½	1/2½
Wellingborough	1/7	1/2½
Welwyn	1/6½	1/2
Welwyn Gar. City	1/7½	1/2½
Wells (Norfolk)	1/4	1/0
West Bromwich	1/7½	1/2½
Westcliff-on-Sea	1/7	1/2½
Weston-super-Mare	1/6½	1/2
Weybridge	1/6½	1/2
Weymouth	1/5*	1/0½
Whitby	1/6½	1/2
Whitstable	1/5½	1/1½
Widnes	1/7½	1/2½
Wigan	1/7½	1/2½
Wigton	1/6	1/1½
Willington	1/7	1/2½
Wilmslow	1/7½	1/2½
Winchester	1/6	1/1½
Windermere	1/6	1/1½
Windsor	1/6½	1/2
Wisbech	1/5	1/0½
Witham	1/5½	1/1½
Woking	1/6	1/1½
Wokingham	1/5½	1/1½
Wolverhampton	1/7½	1/2½
Woodbridge	1/5	1/0½
Worcester	1/7	1/2½
Workington	1/6	1/1½
Worksop	1/7	1/2½
Worthing	1/5½	1/1½
Wrexham	1/7	1/2½
Wroxham	1/5	1/0½
Wycombe	1/6	1/1½
Wymondham	1/4½	1/0½
Yeovil	1/6	1/1½
York	1/7½	1/2½

* Painters 1d. less than other Craftsmen. † Painters ½d. less than other Craftsmen. ‡ Plasterers 1/10½.

¶ Tradesmen's Labourers 1/4½. Navvies and General Labourers 1/4.

§ Joiners, Plumbers, Bricklayers, Tilers and Masons receive 2/- per week or 4d. per day Tool Money.

For Building Trade Wages in Scotland see page 506.

CURRENT PRICES FOR BUILDING WORK IN LONDON.

Note.—These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10 per cent. on the prime cost, without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts, and from 1s. 6d. per £100 Fire Insurance. The whole of the information given is copyright.

		£	s.	d.
PRELIMINARIES.				
Hoardings, with suitable gate, 8 ft. high	per ft. run	0	3	0
Steel scaffolding for brickwork	per sqre.	1	5	0
Steel scaffolding for stone building	,,	1	10	0
Steel gantry for stone building	per ft. run	2	10	0
Office, shed for cement and mess-room	say	75	0	0
EXCAVATOR.				
Digging, throwing out and filling into carts and carting to shoot, 5 ft. deep	per yd. cube	0	7	9
Add if stiff clay	,,	0	1	0
Add for every additional 5 ft.	,,	0	0	6
Add if in trenches	,,	0	0	9
Add to price of digging for breaking up concrete foundation and brickwork	,,	0	10	0
Return, fill and ram	,,	0	1	9
Fill into carts and cart away	,,	0	3	6
Planking and strutting to trenches	per ft. super	0	0	3½
Planking and strutting to sides of basement excavation next roadway	,,	0	1	4
Needling, flying and raking shores and removing after and carting away	per ft. cube	0	6	9
CONCRETOR.				
Portland cement and ballast concrete 1-6 in. foundations	per yd. cube	1	2	0
Add in underpinning in short lengths	,, ,,	0	6	0
Concrete in floors, ¾ in. aggregate, and sand, 1-2-4—				
4 in. thick	per yd. super	0	3	4
6 in. thick	,, ,,	0	4	8
Add if trowelled smooth	,, ,,	0	0	9
Add for hoisting, each floor	,, ,,	0	0	3
Concrete 1-2-4 in. beams and stanchions	per ft. cube	0	1	4
Concrete in lintols, with steel rod reinforcement each 4½ in. width and shuttering	,, ,,	0	4	0
1½ in. centering, with stout supports for concrete floors	per square	2	2	0
Do. to sides and soffites of beams	per ft. super	0	0	8
Do. to sides of stanchions	,, ,,	0	0	7
Steel rod reinforcement under ⅝ in. diameter, cut, bent and placed in position	per cwt.	1	8	0
Do. do. over ⅝ in. diameter	,,	1	5	0
BRICKWORK.				
Reduced to 1½ brick in flettons, lime mortar	per rod	26	0	0
Add for 2nd hard stocks	,,	8	0	0
Add for Blue Staffordshire	,,	22	0	0
Add to above if in 1-4 cement	,,	0	15	0
Add if in backing to stonework	,,	1	5	0
Add if in underpinning in cement	,,	4	10	0
Add if above 40 ft. to 60 ft. high	,,	2	0	0
SUNDRIES.				
Damp course in double course of slates, breaking joint	per ft. super	0	0	11
Vertical do. do.	,,	0	1	2
Bitumastic	,,	0	0	5
Lead core	,,	0	0	10
Cut, tooth and bond new to old brickwork	,,	0	1	0
Rake out joints of brickwork	,,	0	0	1
Leave chase for concrete floor	per ft. run	0	0	2
Cut chase 4½ in. deep for concrete floor	,,	0	1	2
Leave chase for vertical pipe	,,	0	0	4
Cut chase for vertical pipe	,,	0	1	4
Rake out joint for flashings and point	,,	0	0	2
Do. stepped do.	,,	0	0	4
Do. for asphalt skirting	,,	0	0	2
Build in ends of timbers	each	0	0	4
Do. steel joists up to 12 in. deep	,,	0	0	6
Do. step and make good facings	,,	0	1	6
Set and flaunch chimney pots	,,	0	7	6
Render fire openings	,,	0	2	0
Bed and point door frames one side	,,	0	3	0
Do. both sides	,,	0	4	6
Do. window frames, one side	,,	0	4	0
Setting only register grate	,,	1	0	0
Do. interior hearths and mantles	,,	1	15	0
Do. kitchen range, large	,,	5	0	0
Fix air brick and form flue	,,	0	2	0
Cut holes for pipes and make good facings, 9 in. wall	,,	0	2	0
Do. do. 13½ in. wall	,,	0	2	6
Do. large pipes and do. 9 in. wall	,,	0	3	0
Do. do. 13½ in. wall	,,	0	3	6
FACINGS.				
Extra for facings in Flemish bond for each 10s. per thousand over the price of Flettons	per ft. super	0	1	½
Pointing facings to approval	,,	0	3	
Arches extra over Flettons in stocks	,,	0	8	
Do. in reds	,,	1	0	
Do rubbed and gauged in putty	,,	5	9	

		£	s.	d.
PARTITIONS.				
2 in. breeze slab partitions in cement	per yd. super		4	0
3 in. do. do.	,,		4	6
2 in. hollow-tile do.	,,		4	9
3 in. do. do.	,,		5	6
PAVING.				
1 in. granolithic paving gauged 5—2	per yd. super		2	7
1½ in. do. do.	,,		2	11
1 in. × 6 in. covered skirting	per ft. run		0	10
ASPHALT (NATURAL).				
½ in. horizontal damp course	per ft. super		0	6
¾ in. horizontal damp course	,,		0	8
¾ in. vertical do. in two layers	per yd. super		9	6
¾ in. in flats, two layers	,,		6	0
Angle fillet	per ft. run		0	3
6 in. skirting and angle fillet and jointing top edge	,,		1	0
DRAINAGE.				
Excavate, trench for drain and throw out, return, fill and ram, and including any planking and strutting required, and cart away surplus earth per ft. run	1 ft. deep	0	5	
	2 ft. deep	0	10	
	3 ft. deep	1	3	
	4 ft. deep	1	8	
	5 ft. deep	4	2	
	6 ft. deep	5	0	
	7 ft. deep	5	10	
	8 ft. deep	6	8	
4 in. best quality glazed stoneware drain pipe, socketed joints, yarn and neat cement, on and including cement concrete bed, 18 in. wide and 6 in. thick, and benched up on each side of pipe	per ft. run		2	4
6 in. do. do. do. but concrete bed 20 in. and 6 in. thick	,,		3	0
9 in. do. do. do. but concrete bed 23 in. wide and 6 in. thick	,,		4	11
Extra for 4 in. bends	each		2	6
Do. 6 in. ,,	,,		3	6
Do. 9 in. ,,	,,		5	6
Extra for 4 in, junctions	,,		2	9
Do. 6 in. ,,	,,		3	9
Do. 9 in. ,,	,,		6	0
4 in. stoneware gully, encased in concrete and making good granolithic paving	,,		13	0
6 in. do.	,,		14	0
9 in. do.	,,		18	6
4 in. stoneware interceptor, and surround with concrete	,,	1	5	0
6 in. do.	,,	1	10	0
9 in. do.	,,	2	10	0
IRON DRAINS.				
4 in. C.I. drain and laying and jointing in molten lead	per ft. run		3	4
6 in. do. do.	,,		5	0
Extra for 4 in. bends	each		10	0
Extra for 6 in. bends	,,		18	0
Extra for 4 in. junctions	,,		17	6
Extra for 6 in. junctions	,,		30	0
MASON.				
Bath stone and all labour, fixed	per ft. cube		10	9
Portland stone and all labour, fixed	,, ,,		17	9
York stone templates, fixed	,, ,,		12	6
York stone steps, fixed	,, ,,		16	0
York stone cills, fixed	,, ,,	1	2	0
SLATER.				
24 × 12 Bangor slates laid to 3 in. lap secured with zinc nails	per square	3	18	6
20 × 10 do.	,,	3	13	6
16 × 8 do.	,,	3	11	6
Extra to eaves course	per ft. run		0	9
Extra to top edge and square abutments	,,		0	4½
Extra to verge and labour only, bedding and pointing	,,		0	7½
Raking, cutting and waste	,,		0	7
Half-round red ridge tile	,,		1	2
Half-round blue ridge tile	,,		1	8
Fixing only soakers	per dozen		0	9
Red hand-made sand-faced tiles laid to 4 in. gauge, nailed every fifth course with galvanised iron nails	per square	3	0	0
Extra to eaves course	per ft. run		0	5
Extra to top edge and square abutments	,, ,,		0	3½
Extra to verge and bed and point	,, ,,		0	11
Half-round ridge	,, ,,		1	4
Bonnet hips, including cutting and waste (both sides)	,, ,,		3	8
Valley tiles, including cutting and waste (both sides)	,, ,,		3	6
Fixing only soakers	per dozen		0	9

CURRENT PRICES FOR BUILDING WORK IN LONDON.—continued.

CARPENTER AND JOINER.

		s.	d.
Fir framed in plates	per ft. cube	4	0
Do. joints	,, ,,	4	6
Do. roofs, etc.	,, ,,	5	3
Do. trusses	,, ,,	6	9

		¾in.	1in.	1¼in.
Deal rough close boarding	per sq.	32/-	38/-	47/-
Battens for slating	,,	10/-	11/-	12/-

		s.	d.
Centre for arches	per ft. super	1	6
Gutter boards and bearer	,, ,,	1	0

FLOORING.

		¾in.	1in.	1¼in.	1½in.
Deal edges shot	per sq.	—	41/-	49/-	58/-
Do. tongued and grooved	,,	—	46/-	55/-	67/-
Do. matchings	,,	42/-	47/6	—	—
Moulded skirtings, including backings and grounds	per ft. super	1/4	1/7	1/9	2/3
Mitres	each	-/6	-/8	-/9	1/-
Stop ends	,,	-/3	-/4	-/4	-/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half in. moulded sashes	per ft. super	1	9
Two in. do. do.	,, ,,	2	0
Add for fitting and fixing	,, ,,	0	2
Deal cased frames, 1 in. linings, 1¼ in. pulley and stiles, 2 in. moulded sashes, in squares, hardwood cill, double hung with pulleys, lines and weights, average size	,, ,,	3	3

DOORS.

		1½in.	1¾in.	2in.
Two-panel square framed	per ft. super	2 1	2 3	2 5
Four-panel do.	,, ,,	2 4	2 6	2 9
Two-panel moulded both sides	,, ,,	2 6	2 9	2 11
Four-panel do. do.	,, ,,	2 9	2 11	3 2

		£	s.	d.
Flush doors. 1½ in. to 2 in. finished thickness skeleton core, covered each side with Columbian pine ply, solid pine edging, 2 ft. 6 in. by 6 ft. 6 in.	each	1	15	0
Do., covered with Gaboon mahogany ply, solid mahogany edging, 2 ft. 6 in. by 6 ft. 6 in.	,,	2	0	0
Solid core, all as first item	,,	2	0	0
Solid core, all as second item	,,	2	5	0
Shaped peep holes, 4 sided	,,	0	5	0
Hexagonal holes	,,	0	6	0
Circular holes	,,	0	7	0

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per ft. cube	12	0
Hardwood do. do.	,, ,,	36	0

		1in.	1¼in.	1½in.
Plain deal jamb linings, framed	per ft. super	1 7	1 8	1 11
Deal shelves and bearers	,, ,,	1 2	1 4	1 7
Add if cross-tongued	,, ,,	-/2	-/2	-/2
Deal window board, tongued to oak cill and bearers	,, ,,	1 6	1 9	2 0

		s.	d.
Deal moulding, tongued and grooved to window board	per ft. run	0	6

SUNDRIES.

		s.	d.
Deal architrave, including mitres per sectional inch.	per ft. run	0	1
Glazing beads, deal fixed	,, ,,	0	2
Do. fixed with brass screws and cups	,, ,,	0	4
Rebate	,, ,,	0	0½
Groove	,, ,,	0	0½
Notching	,, ,,	0	2
Tongued and grooved angle	,, ,,	0	3½
Rounded heel and hollow	,, ,,	0	2½

STAIRCASES.

		1in.	1¼in.	1½in.	2in.
Deal treads and risers on and including rough brackets	per ft. super	2/-	2/3	2/8	—
Deal strings, wrot and framed	,, ,,	—	—	2/2	2/8
Housings	each				9 9
Mahogany handrail, average 3 in. x 3 in.	per ft. run				5 6
Add if ramped	,, ,,				11 0
Add if wreathed	,, ,,			1	2 0

FIXING ONLY IRONMONGERY.

	s.	d.
Barrel bolts	0	8
Sash fasteners	1	0
Casement fasteners	1	2
Casement stays	1	2

FIXING ONLY IRONMONGERY—*Continued.*

	s.	d.
Flush bolts	1	6
Cupboard locks	1	6
Rim locks and furniture	2	0
Mortice locks and furniture	4	0
Floor springs, including oil	20	0
Overhead springs	5	0

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	19	6
Compound girders	,,	22	6
Stanchions	,,	24	3
Roofwork	,,	29	6

RAINWATER GOODS.

		3 in.	4 in.	5 in.	6 in.
Half-round eaves gutters and fixing	per ft. run	1/3	1/4	1/10	1/11
Ogee do. do.	,, ,,	1/5	1/6	2/1	2/9
R.W. pipe and fixing	,, ,,	1/7	2/1	—	—
Extra for shoes and bends	each	3/3	4/6	—	—
Do. stopped ends	,,	1/3	1/7	2/-	3/-
Do. nozzles and angles	,,	2/7	3/-	4/2	4/8

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	38	0
Do. in flats	,,	36	6
Extra labour and solder in cesspools	each	6	0
Welt joint	per ft. run	0	4
Soldered seam	,, ,,	1	6
Copper nailing—close	,, ,,	0	3
Do. do. open	,, ,,	0	2
Soldered dots	each	2	0
Bossed ends to rolls	,,	0	6

	½in.	¾in.	1in.	1¼in.	1½in.	2in.	4in.
Lead overflow per ft. run	-/8½	1/-	1/6	1/9	2/1	2/9	—
,, service ,,	1/2	1/9	2/8	3/6	4/-	5/3	—
,, soil ,,	—	—	—	—	—	—	6/-
Bends in pipe each	—	—	—	—	1/9	2/-	5/6
Wiped solder joints ,,	1/9	2/3	2/6	3/-	3/4	4/-	5/9
Lead traps and cleaning screws ,,	—	—	—	6/6	9/6	—	—
Stopcocks and joints ,,	11/-	14/-	18/-	—	—	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yd. super	2	0
Do. narrow widths	per ft. super	0	4
Do. and set with Sirapite	per yd. super	2	3
Do. narrow widths	per ft. super	0	4
Do. and set with Keenes	per yd. super	3	0
Do. narrow widths	per ft. super	0	5½
Add sawn lathing	per yd. super	1	4
Add metal lathing (not including hangers or runners for suspended ceilings)	,, ,,	2	4
Portland cement screed	,, ,,	1	7
Do. plain face	,, ,,	3	3
Mouldings in plaster	per 1 in. girth	0	1½

GLAZIER.

		s.	d.
24 oz. sheet	per ft. super	0	7¼
26 oz. sheet	,, ,,	0	8
24 oz. Obscured sheet	,, ,,	0	8¾
Double Cathedral	,, ,,	0	9½
Majestic	,, ,,	0	10
Flemish	,, ,,	0	10
Pinhead Morocco	,, ,,	0	10
¼ in. rough rolled or cast plate	,, ,,	0	10¾
¼ in. wired cast plate	,, ,,	1	1⅜

PAINTER.

		s.	d.
Preparing and distempering, two coats	per yd. super	0	7½
Knotting and priming	,, ,,	0	7
Plain painting, one coat	,, ,,	0	9
Do. two coats	,, ,,	1	2
Do. three coats	,, ,,	1	9
Do. four coats	,, ,,	2	4
Graining	,, ,,	2	3
Varnishing, twice	,, ,,	1	9
Sizing	,, ,,	0	3
Flatting	,, ,,	0	7
Enamel	,, ,,	1	1
Wax polishing	per ft. super	0	6
French polishing	,, ,,	1	2
Preparing for and hanging paper	per piece	2/-	to 4/-

PRICES CURRENT OF MATERIALS*

Owing to the exceptional circumstances which prevail at the present time prices of materials should be confirmed by inquiry.

BRICKS, &c.

Delivered to site, City and Central Area, Full Lorry Loads. £ s. d.
Best Stocks 4 15 0
Second Hard Stocks 4 8 0

Per 1,000. Delivered at London Goods Stations.

2½ in. Phorpres.	King's Cross Station. per 1,000. s. d.	To sites in W.C. District. s. d.
Pressed bricks	46 3	50 6
Cellular bricks	46 3	50 6
Keyed bricks	48 3	52 6
Cellular Keyed bricks	48 3	52 6
Rustic bricks	*66 3	*70 6
Cellular Rustic bricks	*66 3	*70 6
Single Bullnose	64 3	68 6
White bricks	*66 3	*70 6
Sandfaced bricks	—	75 6

* Subject to a special discount of 2s. per 1,000 ft. accompanied by order for Pressed.

White Midhurst Facing Bricks (delivered London site) £ s. d. 3 12 6
Best blue Pressed Staffs 8 6 6
Do. Bullnose 8 16 6
Blue Wire Cuts 7 4 0

Best Stourbridge Fire Brick :—
£ s. d. — £ s. d.
2½ in. ..... 7 15 0 3 in. 8 15 0

GLAZED BRICKS—

Best White Ivory and Salt Glazed Stretcher	24 0 0	D'ble Str'tch'rs	32 10 0
		D'ble Headers	29 10 0
Headers	23 10 0	One side & two ends	33 10 0
Quoins, Bullnose and 4½in. Flats	30 10 0	Twosides&one end Splays and Squints	34 10 0
			31 0 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

PARTITION SLABS.

Delivered London Area.

"PHORPES" HOLLOW PARTITION BLOCKS.

2" per yd. sup.	2 3	3" per yd. sup.	2 9
2½" " "	2 6	4" " "	3 1

CLINKER CONCRETE.

2" per yd. sup.	1 6	3" per yd. sup.	2 0
2½" " "	1 8	4" " "	2 4

CRANHAM TERRA COTTA.

2" per yd. sup.	3 0	3" per yd. sup.	3 8
2½" " "	3 6	4" " "	4 7

HEMPSTEAD—KEYED TWO SIDES.

12" x 9" x 2"	2 6	12" x 9" x 3"	3 0
12" x 9" x 2½"	2 9	12" x 9" x 4"	3 9

Per yard super d/d. Free on site, London.

	s. d.	
Thames Ballast	7 3	per yd.
Pit Ballast	6 3	" "
Pit Sand	7 9	" "
Washed Sand	8 3	" "
¾in. Shingle	7 3	" "
¼in. Broken Brick	11 3	" "
Pan Breeze	8 3	" "

delivered 2 miles radius Paddington.

CEMENT.

Best British Portland Cement. Standard Specification delivered London Area in jute sacks (11 to ton), or paper bags (20 to ton) free (non-returnable) :— £ s. d.
4 ton loads and upwards site ..... Per ton 2 2 0
1 ton to 4 tons site 2 5 0
Alongside Vauxhall in 80-ton lots 1 19 6
"Ferrocrete" Rapid Hardening Cement :—
4 ton loads and upwards site 2 8 0
1 ton to 4 tons site 2 11 0
Alongside Vauxhall in 80-ton lots 2 5 6
Stores in Reserved Bins at Works 1/6 ton extra.

NOTE.—Jute sacks are charged 1s. 6d. each and credited 1s. 6d. nett, if returned in good condition within three months, carriage paid.

"Aquacrete" Water Repellent, "Blue Circle" Cement, 30/- per ton extra on ordinary "Blue Circle" Portland Cement prices.

"Colorcrete" Nos. 1 and 2 Coloured Rapid Hardening Portland Cement in 1-cwt. paper bags free (non-returnable) in 1-ton lots and upwards site 3 9 0

"Colorcrete," not rapid-hardening, in 1-cwt. paper bags free (non-returnable), according to colour, from £7 to £15 10s. per ton.

"Snowcrete" White Portland Cement in 1-cwt. paper bags free (non-returnable)
1 tons and upwards site 8 15 0
Super Cement (Waterproof) paper bags free 3 12 0
Roman Cement £6 15 Keene's Cement, White 6 0 0
Parian Cement £6 0 " " Pink 5 12 6
Cementone Colours for cement according to tints per cwt. from £2 16s. 0d.

PLASTER.

	£ s. d.		£ s. d.
Coarse, Pink	3 2 0	Sirapite, Coarse	3 10 0
" White	3 12 6	" Finish	3 18 0
Pioneer	3 10 6		
Super Carbo	2 7 6	4-ton loads and over London Area, paper bags free.	
Carbo Setting	2 12 6		
Best Ground Blue Lias Lime	1 17 6	Grey Stone Lime	2 2 0
		Chalk Lime	2 2 0
Granite Chippings	1 12 0	Hair per cwt.	2 7 6

NOTE.—Sacks are charged 1s. 9d. each, and credited 1s. 6d., if returned in good condition within three months, carriage paid.
Stourbridge Fireclay in sacks 37s. per ton at rly. dep.

STONE.

BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube ..... s. d. 2 10½

BEER STONE—RANDOM BLOCK—
Free on rail at Seaton Station .. per ft. cube 2 3
Delivered free on rail Nine Elms, S.R. " 3 1½
Selected approximate size one way, 1d. per cubic ft. extra, selected approximately three sizes or for special work, 3d. per cubic ft. extra.

PORTLAND STONE—
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube ..... s. d. 4 5
Do. do. delivered on road waggons as above stations, per ft. cube 4 6
White basebed, 3d. per ft. cube extra.
NOTE.—1d. per ft. cube extra for every ft. over 20 ft. *average* and ¼d. beyond 30 ft.

HOPTON-WOOD STONE—
F.O.R. Quarries, Wirksworth, Derbyshire, Random blocks from 10 ft. and over F.ft.cb. 14 0
Sawn two sides 22 6

HOPTON-WOOD STONE—
Sawn three or four sides 27 9

YORK STONE, BLUE—*Robin Hood Quality.*
Delivered at any Goods Station, London
6 in. sawn two sides landings to sizes (under 30 ft. super) ..... per ft. super 5 0
6 in. rubbed two sides, ditto .. " 5 6
3 in. sawn two sides slabs (random sizes) ..... " 2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) (paving) ..... " 1 6½
1½ in. to 2 in., ditto ..... " 1 3¼

HARD YORK—
Delivered at any Goods Station, London.
Scrappled random blocks ..... per ft. cube 6 3
6 in. sawn two sides landings to sizes (under 40 ft. super) ..... per ft. super 5 1½
6 in. rubbed two sides, ditto .. " 6 1½
4 in. sawn two sides slabs (random sizes) ..... " 3 1½
3 in. ditto ditto ..... " 2 5
2 in. self-faced random flags .. Per yd. super 7 6

CAST STONE.

Delivered in London are in full van loads, per ft. cube : Plain, 7s. 6d. Moulded, 8s. 6d. Sills, 10s. 0d.

HARD WOOD.

1 INCH AND UP THICK.

Average price for prime quality. £ s. d.
Dry Austrian Wainscot, per ft. cube 0 17 0
Dry American and/or Japanese Figured Oak, per ft. cube ..... 10 0 to 0 12 6
Dry American and/or Japanese plain Oak, per ft. cube 0 11 6
Dry sq. edged Honduras Mahogany, per ft. cube 0 15 0
Dry log-cut Honduras Mahogany, per ft. cube ..... 12 6 to 0 16 0
Dry Cuba Mahogany, per ft. cube 1 1 0
Dry Teak, per ft. cube 0 14 0
Dry American Whitewood, per ft. cube 0 10 6
Best Scotch Glue, per cwt. 3 0 0
Liquid Glue, per cwt. ..... 4 7 0 to 5 10 0

SOFT WOOD.

GOOD BUILDING DEAL.

Inches.	Per stan.	Inches.	Per stan.
4 ×11	£26 10	3 × 6	£22 10
4 × 9	26 10	3 ×11	26 10
4 × 8	24 10	2 ×11	26 10
4 × 7	24 10	3 × 9	23 10
3 × 8	22 10	2½× 9	23 10
3 × 7	22 10	3 × 4½	22 0
2½× 7	22 10	3 × 4	22 0

PLANED BOARDS.

1×11	£26 10	1×9	£25 0

PLAIN EDGE FLOORING.

Inches.	Per sq.	Inches.	Per sq.
¾	17/-	1¼	28/-
⅞	20/-	1½	35/-
1	22/-		

TONGUED AND GROOVED FLOORING.

Inches.	Per sq.
1	22/6
1¼	29/-
1½	36/-

Ins. BATTENS. s. d.
2×2 per 100 ft. 2 6

MATCHING (BEST)

Inches.	Per sq.
¾	18/-
⅞	20/-
1	26/-

SAWN LATHS. s. d.
Per bundle 2 6

SLATES.

First quality slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate Station. Per 1,000 actual.

	£ s. d.		£ s. d.
24 by 12 ..	31 5 0	18 by 10 ..	16 10 0
22 by 12 ..	26 5 0	18 by 9	14 17 6
22 by 11 ..	23 12 6	16 by 10 ..	14 7 6
20 by 12 ..	23 2 0	16 by 8	11 6 0
20 by 10 ..	20 15 0		

TILES.

Delivered at London rate stations in full truck loads of not less than 6 tons. ..... Per 1,000 f.o.r. London.

Best machine-made tiles from Broseley or Staffordshire district		£4 2 6
ditto hand-made ditto		4 17 6
Ornamental ditto		5 2 6
Hip and valley tiles (per dozen)	Hand-made	0 8 6
	Machine-made	0 8 0

METALS.

JOISTS, GIRDERS, &C., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£16 10 0
Plain Compound Girders	19 10 0
" " Stanchions	21 5 0
In Roof Work	25 0 0

MILD STEEL ROUNDS.—To London Stations, prt ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	17 12 6	⅝ in. to ½ in.	16 2 6
⅜ in.	16 12 6	⅝ in. to 2½ in.	15 12 6

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £10 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Standard Wrot. Mild Steel Tubes. and Tubulars. Sizes. ⅛in. to ⅜in.	Standard Flanges. Sizes. ⅛in. to 2in.	Standard Fittings. ⅛in. to 2in.
	%	%	%
Gas	60	65	58½
Water	57	62½	55
Steam	53½	58½	50
Gal. gas	50	55	48½
Galv. water	45	50	43½
Galv. steam	38½	43½	40

C.I. HALF-ROUND GUTTERS—London Price ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/9½	1/8	7d.
3½ in.	2/1	2/-	8½d.
4 in.	2/1	2/-	8½d.
4½ in.	2/2½	2/1	9d.
5 in.	2/4½	2/4	10d.

O.G. GUTTERS.

3 in.	2/1	2/-	8½d.
3½ in.	2/3½	2/2	9½d.
4 in.	2/5	2/4	10½d.
4½ in.	2/6	2/5	1/0½
5 in.	2/10	2/9	1/2½

RAIN WATER PIPES, &C.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches stock angles.
2 in.	2/8½	1/8	2/5½
2½ in.	2/9½	1/11	2/11½
3 in.	3/8	2/4½	3/7½
3½ in.	4/1	2/10½	4/1½
4 in.	4/9½	3/5	5/-

Less 20 per cent. trade discount.
Tonnage allowance—4-ton lots, 5 per cent.
2-ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Stock,

	Pipe. s. d.	Bends, stock angles. s. d.	Branches. stock angles. s. d.
2 in. per yd. in 6 fts. ..	3 5	2 5	2 11
2½ in. " ..	3 10	2 8	3 8
3 in. " ..	4 2	2 11	4 4
3½ in. " ..	4 7	3 8	5 0
4 in. " ..	5 1	4 0	5 10

L.C.C. COATED DRAIN PIPES.—London Prices, ex Stock.

	Pipe. s. d.	Bends, stock angle, stock angles. s. d.	Branches. stock angles. s. d.
3 in. per yd. in 9 ft. lengths	4 9	5 4	8 9
4 in. " cwt. qr. lbs. 1 1 20 ..	6 9	6 3	11 0
5 in. " 1 2 22 ..	8 4	11 0	16 11
6 in. " 2 0 6 ..	10 0	12 11	21 3

Gaskin for jointing 45/- per cwt.

IRON—	Per ton. £ s. d.		London. £ s. d.
Common Bars	12 15 0	..	13 15 0
Staffordshire Crown Bars— Good merchant quality	14 10 0	to	16 0 0
Staffordshire Marked Bars	18 0 0	..	19 0 0
Mild Steel Bars	12 18 0	..	13 18 0
Steel Bars, Ferro-Concrete quality, basic price	14 8 0	..	15 8 0
Hoop iron, basic prices	14 8 0	..	15 8 0
" Galvanised	24 8 0	..	26 8 0

HUDDERSFIELD
Building Society

Experience has shown that the arrangements made by the Huddersfield to assist occupier borrowers have given the utmost satisfaction, and the service rendered has been greatly appreciated by builders' clients.

Write for information to The Huddersfield Building Society, Britannia House, 203, Strand, London, W.C.2, or to the Head Office, Britannia Buildings, Huddersfield. Andrew Stewart, C.A., Managing Director.

WHEN YOU INVEST—A HOUSE IS BEST

* The information given on this page has been specially compiled for THE BUILDER, and is copyright. The aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS—*(contd)*

IRON— Per ton in London.

	£	s.	d.		£	s.	d.
Soft Steel Sheets, Black—							
Ordinary sizes, to 20 g. ..	16	5	0	..	17	5	0
" " 24 g. ..	17	5	0	..	18	5	0
" " 26 g. ..	18	5	0	..	19	5	0
Sheets, Flat, Best Soft Steel, C. R. and C.A. quality—							
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	17	10	0	..	18	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.. ...	19	10	0	..	20	10	0
No. 1 quality £4 per ton extra.							
Flat and Galvanised Corrugated Sheets—							
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18	15	0	..	20	15	0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.. .	19	5	0	..	22	15	0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	21	5	0	..	23	5	0
Sheets, Galvanised, Flat, Best quality—							
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	19	15	0	..	22	15	0
Best Soft Steel Sheets, 22 g. and 24 g.	20	15	0	..	22	5	0
Best Soft Steel Sheets, 26 g.	22	5	0	..	23	5	0
Cut Nails, 3 in. to 6 in. ...	19	10	0	..	21	10	0
(Under 3 in. usual trade extras.)							

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER

		s.	d.
Seamless Copper tubes (basis).	per lb.	1	1
Strong sheet	"	1	3
Thin	"	1	4
Copper nails	"	1	3
Copper wire	"	1	3

PLUMBERS' BRASS WORK.

Delivered in London.
Stamped by Met. Water Board.

CRUTCH HEAD SCREW DOWN BIB COCKS FOR IRON. EASY CLEAN.

½ in. ¾ in.
29/- 45/- per doz.

CHROMIUM PLATED TOILET SCREW DOWN BIB COCKS FOR IRON. EASY CLEAN.

½ in. ¾ in.
40/- 59/- per doz.

SCREW DOWN STOP COCKS FOR IRON.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
31/- 44/6 75/- 175/- 250/- 396/- per doz.

SCREW DOWN STOP COCKS WITH TWO UNIONS FOR LEAD.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
42/6 65/- 102/- 195/- 210/- 510/-per doz.

DOUBLE NUT BOILER VCREWS.

½ in. ¾ in. 1 in. 1¼ in. 1½ in. 2 in.
7/6 9/- 14/- 24/- 37/6 54/-per doz.

HEAVY CROYDON BALL VALVES.

½ in. ¾ in. 1 in. 1¼ in. 1½ in.
33/6 55/6 85/- 165/- 237/- per doz.

CAPS AND SCREWS.

1¼ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.
9/- 11/- 16/6 29/- 42/- 45/- per doz.

BRASS FERRULES OF SLEEVES.

1½ in. 2 in. 3 in. 3½ in. 4 in.
9/6 11/6 20/6 26/- 37/- per doz.

DRAWN LEAD TRAPS WITH BRASS CLEANING SCREWS.

1¼ in. 1½ in. 2 in. 3 in.
8 lb. Lead P... 17/6 23/- 32/6 66/6 per doz.
8 lb. Lead S... 21/6 27/6 39/6 73/- per doz.

SOLDER.—Plumbers', 1/1, Tinmen's, 1/3, Blowpipe, 1/5 per lb.

PAINTS, &c.

		£	s.	d.
Raw Linseed Oil, in pipes	per gallon	0	2	7
" " " in barrels	"	0	2	9
" " " in drums	"	0	2	11
Boiled " " in barrels	"	0	3	0
" " " in drums	"	0	3	2
Turpentine, in barrels	"	0	3	2
" in drums (10 gals.) ..	"	0	3	4
Genuine Ground English White Lead, per ton		49	0	0
(In not less than 5-cwt. casks.)				
Extra for 1-cwt. kegs over 5-cwt. casks is 2/9 cwt.				

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Pauls," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots per ton delivered 68 0 0
Red Lead, Dry (packages extra) .. per ton 38 0 0
Best Linseed Oil Putty ..... per cwt. 0 14 9
Size. XD quality ..... ftkn. 0 3 6

VARNISHES, &c.

		Per gallon.		
Oak Varnish	Outside	0	14	0
Fine do.	"	0	16	0
Fine Copal	"	0	18	0
Pale Copal	"	1	0	0
Pale Opal Carriage	"	1	4	0
Best do.	"	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper	"	0	18	0
Fine Copal Cabinet	"	1	2	0
Fine Copal Flatting	"	1	0	0
Hard Drying Oak	"	0	18	0
Fine Hard Drying Oak	"	0	19	6
Fine Copal Varnish	"	1	0	6
Pale do.	"	1	12	0
Best do.	"	1	2	6
Best Japan Gold Size		1	12	6
Best Black Japan		0	10	0
Oak and Mahogany Stain (water)		0	12	0
Brunswick Black		0	7	6
Berlin Black		0	14	0
Knotting (patent)		0	15	0
French and Brush Polish		0	12	0
Liquid Dryers in Terebene		0	9	0
Cuirass Black Enamel		0	7	0

THE SCOTTISH BUILDER

NEW BUILDINGS

The Editor welcomes authentic information for this feature from architects, surveyors or contractors. Where business representatives cannot be seen personally at this stage, this should be mentioned. Items should reach 4, Catherine-street, Aldwych, W.C.2, not later than Wednesday morning.

ABERDEEN.—HOUSES.—Contracts for 220 brick houses to be erected at Middlefield scheme at a cost of £97,163, were approved by the Housing Committee of Aberdeen T.C. Tenders amounting to £62,536 were approved for 140 of the houses, which will be of the 3- and 4-apartment flatted type. The committee also approved of a composite tender of £34,627 by Messrs. Stewart Estates, Ltd., Aberdeen, for 80 similar houses at the same site.

BROOM.—HALLS.—Plans in hand for new Church of Scotland suite of halls. The architects are Messrs. J. W. Laird and Napier, 219, St. Vincent-street, Blythswood, Glasgow.

CLYDEBANK. — CLUB.—The Clydebank Golf Club has decided to proceed with the erection of a new club-house, at £4,000.

COATBRIDGE. — HOUSES.—The Corporation is to erect 500 timber houses.

DUMBARTONSHIRE. — BUILDINGS.—The C.C. has decided to provide new police buildings at Milngavie, at £12,260.

DUNDEE. — BUILDINGS.—The following plans have been lodged at the office of the City Engineer: Charlotte-street—bungalows for the Strathmore Building Co., Ltd., architects: Maclaren, Soutar and Salmond, 15, South Tay-street; Cotton-road—nursery school for the T.C.; Commercial-street and Seagate—alterations for Slaters and Bodega, Ltd., architects: Thoms and Wilkie, 21, South Tay-street; Glamis-terrace—bungalows for A. Thain, Itd.; Mains Loan—clinic for the T.C.; Montgomerie-avenue—bungalows for Wm. Black and Co., Ltd.; Murraygate—alterations and additions for F. W. Woolworth and Co., Ltd.; Rockwell-place—store for the Boase Spinning Co., Ltd., architects: Mills and Shepherd, 9, South Tay-street.

EDINBURGH. — BUILDING.—The Dean of Guild Court has granted warrant to the North Merchiston Y.M.C.A. to carry out an extension to their buildings in Watson-crescent, at £4,000. The architect is Mr. T. Forbes MacLennan, Edinburgh. The Court also granted permission to the trustees of the Roman Catholic Church in the Archdiocese of St. Andrew's and Edinburgh to erect a presbytery in Boswell Parkway, Granton. The architect is Mr. Reginald Fairlie, R.S.A.

EDINBURGH. — CONVERSION.—The T.C. has approved the conversion of the Craiglockhart Institution into a home for the aged and infirm, at £34,185.

FALKIRK.—BUILDING.—Plans have been prepared by Messrs. Rowand Anderson, Paul and Partners, Rutland-square, West End, Edinburgh, for new infirmary buildings for the Falkirk and District Royal Infirmary, at Major's-lane.

GLASGOW.—BUILDING.—The Corporation has decided to proceed with 1,882 houses on the Penilee site, Cardonald, at approximately £900,000, and also to carry out a scheme for the erection of 80 houses at Bodystone-road, Carwandric, at £40,000. The Corporation Electricity Committee also propose extensions to the Port-Dundas and Dalmarnock power stations, at £37,000.

GLASGOW. — SHOPS.—Messrs. Montague Burton, Ltd., of Leeds, have purchased a block of property in Sauchiehall-street and Hope-street, which they propose to demolish and erect a block of modern shops and offices on the site.

HAWICK.—WAREHOUSE.—At Walkers Wynd a new warehouse and showroom will be erected by Messrs. R. Pringle and Son, Ltd., Hawick.

INSCH.—HOUSING.—Mr. W. L. Duncan is architect for a housing scheme for the Aberdeenshire C.C.

LANARKSHIRE. — GYMNASIA.—The C.C. have decided to erect gymnasia at Gallowflatt

BUILDING TRADE WAGES IN SCOTLAND

Following are grade rates authorised by the Scottish N.J.C. from April 1. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification	A	A¹	A²	A³	B	B¹
Craftsmen	1/8	1/7½	1/7	1/6½	1/6	1/5½
Labourers	1/3	1/2¾	1/2¼	1/2	1/1½	1/1¼

Aberdeen	A	Dumfriesshire	A²	Inverness	*	Perthshire	A²
Ayrshire	A	Dundee	A	Inverurie	A¹	Peterhead	A¹
Banff	B	Dunoon	A	Kincardineshire	A²	Renfrewshire	A
Berwickshire	A²	East Fife	A	Kinross-shire	A	Rothesay	A
Bridge of Allan	A	East Lothian	A	Lanarkshire	A	Roxburghshire	A²
Broughty Ferry	A	Edinburgh	A	Midlothian	A	St. Andrews	A
Clackmannanshire	A	Fifeshire	A	Monifieth	A	Selkirkshire	A²
Doune	A	Forfarshire	A²	Moray and Nairn	B	Stewartry	A²
Dunblane	A	Glasgow	A	Newport	A	Stirlingshire	A
Dumbartonshire	A	Greenock	A	Peeblesshire	A²	Stornoway	A²
Dumfries	A¹	Hamilton	A	Perth	A	Tayport	A
						West Lothian	A

* This town has its own rates: Masons, 1/6; Carpenters, 1/6; Slaters, 1/6; Plumbers, 1/6½; Plasterers, 1/7, but 1/8 is paid owing to the scarcity at present; Painters, 1/6; and Labourers, 1/1½.

The information given in this table is copyright. Rates of wages in England and Wales are given on page 502.

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

ORDINARY GLAZING QUALITY AND SELECTED GLAZING QUALITY.

	per ft. super		per ft. super.
18 oz. O.Q.	2½d.	32 oz. O.Q.	5½d.
18 " S.Q.	2⅝d.	32 " S.Q.	6¼d.
24 " O.Q.	3¼d.	Obscured Sheet, 18 oz.	3d.
24 " S.Q.	3⅜d.	" " 24 "	4¼d.
26 " O.Q.	3⅝d.	Fluted 21 "	9d.
26 " S.Q.	4½d.	Em'lld 18 oz.,5½d.,24oz.	6⅝d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE AND FIGURED CATHEDRAL, ETC., IN CUT SIZES.

	Per ft.
Rolled plate, ¼ in.	5½d.
Rough cast double rolled, ⅛ in.	6½d.
Rough cast double rolled, ¼ in.	6¾d.
Figured rolled, etc., white	6¾d.
Figured rolled, etc., tinted	9½d.
Rolled Sheet	6d.
White rolled cathedral	6d.
Tinted rolled cathedral	8½d.

Rolled plate is the same price as rough cast double rolled.

	Per ft. s.	d.
Reeded, Broad Reeded, Cross Reeded and Chevron Reeded, ¼ in. thick	0	10½
Wire Rolled, ¼ in. thick	0	9½
Wired Cast, ¼ in. thick	0	9½
"Calores" Sheet, 21 oz.	2	6
" 32 oz.	4	0
" Cast, ¼ in. thick	0	10
" " ⅜ in. thick	1	0
" " ½ in. thick	1	2

"VITA" GLASS.

Clearsheet—not exceeding 1 foot	1	0	
" " 2 feet	1	3	
" over 2 feet.	1	9	
Polished plate not exceeding 1 foot	1	6	
" " 2 feet	3	0	
Cathedral—not exceeding 1 foot	1	0	
" larger size	1	6	
Horticultural Sheet and Cathedral "Vita" Glass Sizes up to 24 inches by 18 inches or not exceeding 3 feet.	1	0	
3/16 in. Wired Georgian Design. Sizes up to 96 inches long by up to 24 inches wide.	2	6	

LEAD, &c.

(Delivered in London.)	Per ton. £	s.	d.
LEAD.—Sheet, English, 4 lb. and up	22	10	0
Pipe in coils	22	0	0
Soil pipe	27	10	0
Compo pipe	29	5	0

NOTE.—Country delivery, 20/- per ton extra, lots under 3 cwt. 4/- per cwt. extra and over 3 cwt. and under 5 cwt., 2/6 per cwt. extra. Cut to sizes, 4/- per cwt. extra.

Old lead, ex London area, at Mills ..... per ton £12 5 0

Advanced Division School, Rutherglen, at £10,000.

LANARKSHIRE. — SCHOOLS.—The C.C. have approved of schemes for the extension of the Lesmahagow High School, at £22,000, and erection of a new school at Strathaven, at £8,000.

LUMPHINNANS. — EXTENSIONS. — The Miners' Welfare Committee has approved of a scheme for the extension of the Miners' Welfare Institute, at £4,000.

PAISLEY.—HOME.—A nurses' home is to be erected on the Hawkhead estate, from plans by the Corporation's own architect, Mr. Frank Stewart, Gilmour-street.

PERTH.—HOUSES.—The T.C. has agreed to proceed with 150 houses on the Muirton housing site.

PERTHSHIRE — EXTENSIONS. — The E.C. has decided to carry out an extension scheme to the High School at Blairgowrie, at £30,270.

RENFREWSHIRE.—ADDITIONS.—The C.C. is to proceed immediately with additions and alterations to the Mossvale School, Paisley.

TENDERS ACCEPTED

Aberdeen.—140 houses at Middlefield, for T.C.:—Brick—*W. Hardie, Linlithgow, £21,410; joiner—*R. & J. Reid, Ltd., Aberdeen, £18,238; slater—*Coutts & Son, Aberdeen, £5,387; plumber—*Wood & Son, Aberdeen, £7,233; plaster—*J. Goodfellow & Co., Ltd., Aberdeen, £5,657; grates—*Middler & Sons, Aberdeen, £1,692; electrical—*R. A. Mair, Aberdeen, £967; painter—*R. Milne, Aberdeen, £1,951.

Aberdeen.—70 houses at Garthdee, for T.C. A. B. Gardner, City Architect:—*Stewart's Estates (Aberdeen), Ltd., Bridge of Don, Aberdeen, £32,763 15s. 10d.

Dumfries.—Sewage works, including detritus tanks, sedimentation tanks, sprinkler beds and sludge beds, at Dalscone, and laying of approx 5,600 yds. of fireclay pipe sewers leading to sewage disposal works, for C.C. O. S. Bell, A.M.Inst.C.E.:—*John Graham, Annan-rd., Dumfries, £16,823 19s. 11d.

Dundee.—Ante-natal clinic at Maryfield Hospital, for T.C.:—Excavator and brickwork, *D. Bowman, £3,270; joiner, *G. D. Graham, £2,071 3s. 11d.; slater and roughcast, *R. Ramsay & Son, £388 11s. 4d.; plumber, *J. Robertson & Son, £979 11s.; plaster, *A. M'Kellar, Glasgow, £328; tile and terrazzo, *Toffolo Jackson & Co., Glasgow, £522 2s. 1d. (Rest of Dundee.)

Dundee.—Electric lift for passengers and goods in boiler house of department's generating station at Carolina Port, for T.C. D. H. Bishop, General Manager and Engineer, Dudhope Crescent-rd.:—*John Bennie, Ltd., Glasgow, £911.

Dundee.—Reinforced concrete foundations and floors for new switch-house at generating station, Carolina Port, for T.C. D. H. Bishop, B.Sc., M.I.E.E., General Manager:—*Concrete Piling, Ltd., London, £8,297.

Dunning.—Housing scheme. James S. Dow, architect and quantity surveyor, Charlotte-st., North Inch, Perth:—Excavator, brick & building, etc.:—*W. Gordon & Co., Auchterarder. Plumber and sanitary engineering—*J. M. Drummond, Crieff. Joinery, carpentry and ironmongery—*Stewart & Wannan, Cupar. Glazing—*P. & G. McLeod, Ltd., Perth. Plaster, lathing and allied works, etc., and cement—*Don & Shearer, Ltd., Perth. Electrical fittings and installation, etc.—*W. Brothwick, Ltd., Perth. Slater and roughcasting—*J. Menzies, Perth. Painting—*H. Arnott & Co., Crieff.

Fraserburgh.—56 houses at the Marine Park. William H. Hamilton, architect and quantity surveyor, 31, Mid-st., Fraserburgh:—Excavation, brick and building, *A. S. Cheyne, Fraserburgh, £14,779; joinery, carpentry and ironmongery, *A. Hall & Sons, College Bounds, £7,400; painting, *Ferguson & Milne, Fraserburgh, £894; plumber and sanitary engineering, *John McNab, Fraserburgh, £2,828; electrical fittings and installation, etc., *J. M. Paterson & Co., Fraserburgh, £443; plaster, lathing, *A. N. Campbell, Fraserburgh, £1,779 10s., and *Alexander Wiseman & Son, Fraserburgh, £1,446; slater, roughcasting, *C. Dickie & Son, Turriff, £1,176, and *Alexander Thomson & Son, Fraserburgh, £889 10s. 8d.

Fraserburgh.—Timber houses at the West End Bowling Green site, for Corporation. W. H. Hamilton, architect and quantity surveyor, Municipal Offices:—Excavation, brick and building—*A. S. Cheyne, Fraserburgh, £4,515; plumber and sanitary engineering—*J. McNab, Fraserburgh, £2,548; joinery, carpentry and ironmongery—*Carles & Nobel, Ltd. and *W. Bruce & Co., Fraserburgh, £3,501; glazing, painting and allied works—*J. Stewart, Fraserburgh, £557; plaster and lathing, etc., work—*J. MacDonald, Fraserburgh, £1,392; electrical fittings and installation, etc.—*Ferguson & Co., Ltd., Fraserburgh, £223.

Glasgow.—Alterations and extensions to the Victoria Infirmary at Langside. Watson, Salmond & Gray, architects, L.M. and S. Central Station-bldgs., Union-st. Corner. Watson & Whyte, quantity surveyors, 180, St. Vincent-st.:—Excavation, brick and building, *John Train & Co., Ltd., Glasgow; joinery, carpentry and ironmongery, *J.

(*Continued on next column.*)

TENDERS

The Editor welcomes authentic information for this feature from architects, surveyors or contractors. Items should reach 4, Catherine-street, Aldwych, W.C.2, not later than Wednesday morning.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modification.*
¶ Denotes *accepted by H.M. Government departments.*

Barrow.—20 flats, for T.C.:—*Rainey Bros., Ltd., Barrow, £76,287.

Beaumaris.—New wing, consisting of three storeys, in connection with extensions to the "Bulkeley Arms" hotel, for directors. S. Colwyn Foulkes, architect, Central-chambs., Colwyn Bay:—*G. & J. P. Gregory, 24, High-st., Caernarvon.

Beeston and Stapleford.—Wooden shelter and one brick pavilion and lavatory accommodation on new recreation ground at Bramcote, for U.D.C. G. C. Hardy, S.:—*N. Martin, 1, Bailey-st., Stapleford, Nottingham, £600.

Birmingham.—Premises, Broad-st., for Lee, Longland & Co., Ltd., 224, Broad-st. Wood & Kendrick & E. F. Reynolds, architects, 57, Colmore-row:—*B. Whitehouse & Sons, Ltd., 247, Monument-rd., Birmingham, 16.

Birmingham.—New works in Mount-st., for Clark & Howard, Ltd.:—*F. Spencer, Sutton-rd., Erdington, Birmingham.

Birmingham.—Premises in Berners-st., for J. Lucas, Ltd.:—*W. J. Whittall & Sons, Ltd., 132, Lancaster-st., Birmingham.

Bognor Regis.—Stepped concrete apron with supporting works to sea wall, approximately 280 ft. long, between groynes 30 and 32, for U.D.C. H. H. Evans, A.M.Inst.C.E., M.Inst.M. & Cy.E., E. and S. Quantities by E. and S.:—

Meare Bros. (Contractors), Ltd., Lewisham, S.E.13	£11,660 2 10
Crosby & Co., Ltd., Farnham	11,134 7 5
Walter Smith (Public Works), Ltd., Riverhead	10,653 2 6
Willmett Bros., Twickenham	10,544 10 2
Christiani & Neilson, London, S.W.1	9,836 0 6
John Shelbourne & Co., London, E.C.3	9,760 19 2
Bierrum & Partners, Ltd., London, S.W.1	7,606 0 0
*R. Humby, Wimborne	7,197 10 1

(Subject to sanction.)

(*Continued on next column.*)

(*Continued from previous column.*)

Anderson, Glasgow; plumber and sanitary engineering, *George Munro & Co., Ltd., Glasgow; plaster and lathing, *W. Tonnar & Co. (Glasgow), Ltd., Glasgow.

Glasgow.—Public school at Blackhill for T.C. William McCaig, architect, 129, Bath-st., Blythswood, Glasgow:—Excavator, brick and building—*Brown, Fraser & Co., Ltd., Glasgow, £12,513 14s. 4d. Joinery, carpentry and ironmongery—*E. Gibbon & Co., Glasgow, £6,530 10s. 10d. Plumber and sanitary engineering—*R. S. Renfrew & Sons, Ltd., Glasgow, £1,605 17s. 4d. Glazing—*MacDonald & Hughes, Ltd., Glasgow, £191 2s. 1d. Plaster and lathing—*G. Rowe & Co. (Glasgow), Ltd., Glasgow, £538 11s. Iron railing, gates—*J. Robertson & Sons (Glasgow), Ltd., Glasgow, £717 1s.

Glasgow.—Extension to the Mitchel library, for Corporation. Thomas Somers, architect, Office and Public Works:—Excavation—*J. Train & Co., Ltd., Glasgow, £15,446 16s. 10d. Steel construction—*P. & W. MacLellan, Ltd., Tradeston, £15,528 10s. 6d. Brick, mason and building—*Jackson, Brown & Co., Ltd., Glasgow, 2, £15,603 7s. Joinery, carpentry and ironmongery—*T. Stewart, Ltd., Langside, £7,766 0s. 3d. Steel windows and casements, etc.—*Frederick Braby & Co., Ltd., Springburn, £4,083 19s. Glazing and allied works, etc.—*G. G. Kirk, Ltd., Glasgow, £1,154 12s. Asphalt—*W. G. Walker & Sons (Glasgow), Ltd., Glasgow, £665. Plumber and sanitary engineering—*R. Davidson, Glasgow, £1,218 5s. 3d. Heating engineering and installation, etc.—*D. McMillan, Glasgow, £1,784 8s. 6d. Plaster, lathing, granolithic—*R. Jolly & Sons, Ltd., Glasgow, £2,659 11s. 7d. Tile, terrazzo—*Toffolo, Jackson & Co., Ltd., Glasgow, £1,548 13s. 10d.

Newarthill.—Houses on the Carfin-rd. site. William Brown, Lanarkshire County Housing Architect, Clydesdale-st., Hamilton:—Excavation, brick and mason—*Scott & Co., Ltd., Motherwell-Wishaw. Joinery, carpentry and ironmongery—*D. & W. Young & Co., Ltd., Newarthill. Plumber, sanitary engineering—*MacCulloch & Giffen, Glasgow. Slater and roughcasting—*Wilson & Hendry, Ltd., Hamilton. Painter—*T. Hastie & Son, Bridgton, Glasgow. Electrical fittings and installation, etc.—*D. Henderson & Sons (Electricians), Ltd., Glasgow. Plaster, lathing—*F. MacGowan & Co., Carfin. Iron railing, gates—*A. & J. Main & Co., Ltd., Glasgow.

Scotland (H.M.O.W.).—Tenders accepted during week ended March 7:—Electric high-tension substation in basement, Head Post Office, Glasgow—alterations. J. Morrison & Sons (Glasgow), Ltd., 1009, London-rd., Glasgow.

Bootle.—Library, hall and estate office, Linacre-la., for T.C. W. A. Hamson, A.R.I.B.A., B.S.:—*Direct Labour Department. Reinforcements—*Trussed Concrete Steel Co., Ltd., Horseferry House, Horseferry-rd., London, S.W.1.

Bourne.—Renovations, repairs and improvements to the Bourne Corn Exchange, for U.D.C. T. F. Trower, chartered architect, Elsom House, Broad-st., Spalding:—
J. T. Gelsthorpe & Sons, Bourne £2,128
†T. Roper & Sons, Ltd., Sheffield 1,728

Bracebridge.—Heating and hot-water services, electrical work and building extensions and alterations at Heath Hospital. H. S. Hall, L.R.I.B.A., architect, Grimsby. E. G. Phillips, Son & Norfolk, consulting engineers, Annesley-gr., Nottingham:—†Manlove, Alliott & Co., Ltd., Bloomsgrove Wks., Nottingham £6,116

Bradford.—Works, for T.C. J. A. Fletcher, City Architect:—Installation of hot-water services and lavatory basins in 14 bedrooms at Semon Convalescents' Home—*W. Lawson, 25, Brook-st., Ilkley, £277. Electrical work at Technical College extensions—*J. Carter, £1,126. 78 houses in Birksland-st.—*W. Smith, Gilstead, Bingley, £28,618. Extensions to Daisy Hill Council school: Excavator, mason and bricklayer—*F. P. Leach & Sons, Ltd., £2,193. Carpenter and joiner—*J. C. Harrison, £1,539. Plumber and glazier—*F. Robinson, £658. Plasterer and concretor—*W. Tidswell & Son, Denholme Gate, £439. Painter—*G. H. A. Bailey, Ltd., £124. Slater—*H. Castle & Son, Ltd., Brighouse, £180. (Remainder of Bradford.)

Bray.—(1) Reconstruction of baths at Esplanade into public lavatories; (2) construction of new public lavatories at south end of Esplanade, for U.D.C. E. M. Murphy, Town S., 51, Northumberland-rd., Dublin:—

McNally & Co., Dublin	(1)	£1,962 0 0
	(2)	1,456 0 0
Ed. Connelly, Dunlaoghaire	(1)	1,816 14 2
	(2)	1,380 16 2
*J. Rooney, Mountpelier-hill, Dublin	(1)	1,790 5 8
	(2)	1,335 12 6
D. McCambridge, Bray	(1)	1,747 13 6
	(2)	1,427 5 9

Brighton.—Church hall and classrooms, East Moulescombe estate, for Sussex Church Building Committee. Searle & Searle, architects, Paternoster House, Paternoster-row, E.C.4.:—*E. H. Munnion, Ardingly.

Bristol.—Flour mills, provender factory, silos, etc., Avonmouth, for Co-operative Wholesale Society, Ltd. L. G. Ekins, F.R.I.B.A., chief architect (Southern Area), 99, Leman-st., London, E.1. Dr. Oscar Faber, consulting engineer, Romney House, Marsham-st., London, S.W.1:—Foundations and preliminary works—*Holloway Bros. (London), Ltd., Millbank, S.W.1. (Total cost, £150,000.)

Bury.—Rebuilding "Swan" hotel, Moorgate, for Bury Brewery Co., Ltd., George-st. A. Brocklehurst, F.R.I.B.A., architect, 6, The Rock:—*Thompson & Brierley, Ltd., Union Sawmills, Bury.

Caernarvon.—Erection of gymnasium and caretaker's house to Central School, for Caernarvonshire E.C. W. Ll. Jones, F.R.I.B.A., County Architect, Shirehall-st.:—*G. & J. P. Gregory, 24, High-st, Caernarvon, £6,500.

Cannock.—Six bungalows for aged persons in Black Halve-la., Essington, for R.D.C.:—*R. Edmunds, Cheslyn Hay, £1,309.

Canterbury.—Junior and infants' school at Hollow-ln., for City Council:—*G. H. Denne & Son, Ltd., Deal, £35,423.

Cardiff.—Installation of electric wiring in consumers' premises under council's assisted wiring scheme, for R.D.C. H. Jackson, Council's Electrical Engineer and Manager, Park House, 20, Park-pl.:—*W. H. Lloyd, Heol Carne, Whitchurch.

Chester.—12 houses at Woodbank, for R.D.C. A. J. Hayton, L.R.I.B.A., architect, 22, Newgate-st.:—*M. Taylor, Buckley, near Chester, £4,218 18s. 6d.

Chester-le-Street.—South Pelaw sewerage scheme, for U.D.C. Balfour & Sons, engineers, 3, St. Nicholas'-bldgs., Newcastle-on-Tyne:—*J. Elliott, 17, Hestobel-gdns., Bishop Auckland.

Clifton Without, near York.—Senior school, for North Riding E.C. J. R. White, F.R.I.B.A., County Architect, Northallerton:—*R. A. Poskitt (Beal), Ltd., Beal, Goole.

Congleton.—School, dining hall, governor's house extensions to existing buildings and new lavatory accommodation, for National Children's Home and Orphanage. G. H. Herring, architect, 21, Milton-rd., Harpenden:—*Cooper Bros. (Builders), Ltd., Catherine-st., Macclesfield, £21,000.

Coventry.—Meeting hall, for Society of Friends. A. J. Penberthy, A.R.I.B.A., architect, 74, Bath-rd., Wolverhampton:—*P. R. Alcock & Sons, Castle Mead, Castle-st., Banbury.

Coventry.—Premises at Canley, for Barclays Bank, Ltd. Peacock & Bewlay, architects, 83, Colmore-row, Birmingham:—*E. Harris & Son, Coventry.

Dartford.—Steel shelving for the proper assembling of stores for A.R.P. work, for R.D.C.:—*Art Metal Construction Co., £110 4s. 4d.

Denbigh.—Store section at Smithfield, for T.C.:—
H. Lloyd Jones, Denbigh £527
Morris Owen, Henllan-pl., Denbigh ... 425
W. G. Shone, Denbigh 345
*E. J. Lake, Arllwyn, Tremeirchion 330

Didcot.—New hospital, for Didcot Hospital Committee:—*Boyd & Murley, Reading.

Droitwich.—Additions of a storey to Council offices, Ombersley-rd., for R.D.C. Oswald Sharpe, Building Surveyor, Ombersley - st.: — *Spicers (Builders), Ltd., Ombersley-rd., Worcester, £1,424.

Dublin.—Works, for Corporation:—Section No. 8 of Liffey water supply scheme—*Leighton's, Ltd., Victoria-st., London, £35,194. Superintendent's residence and boundary wall at Blackhorse Bridge, Drimnagh—*J. F. Cleary & Co., Kilmainham, Dublin. Boundary walls and fences, Crumlin North housing estate—*Thos. M'Manus, Dublin, £1,106. Treatment in mastic asphalt of 39,000 sq. yds. of roadway—*South of Ireland Asphalt Co., Ltd., £24,913.

Eire.—Contracts placed by Commissioners of Public Works:—Cullohil National School—improvements, Bernard Lyons & Son, Thurles. Rathcormac Garda Station, Co. Cork—station, J. M. O'Keeffe, Mallow. Shannow National School, Co. Cavan—school, Thos. Reynolds, Granard. St. Patrick's (Murlog) National School, Co. Donegal—improvements, Larkin Bros., Wexford. Cloonfad National School, Roscommon—school, P. Birmingham, Milltown, Co. Galway. Drumbibe National School, Co. Leitrim—improvements, M. Rourke, Ballinamore. Listowel Sluagh Hall, Co. Kerry—hall, M. Falvey, Lixnaw. Moynalty National School, Co. Meath—school, M. Molloy, Dublin.

Erith.—Branch library at 115, King Harold's-way, for T.C. John H. Clayton, M.Inst.M. & Cy.E., B.E. and S.:—

M. J. Gleeson, Ltd., North Cheam	£1,052	0	0
H. C. Richardson & Co., Ltd., Barnehurst	836	0	0
F. Ling & Sons, Ltd., Erith	807	0	0
David Kenn & Sons, Ltd., Bexley	778	0	0
E. D. Winn & Co., Ltd., London	776	18	C
S. H. Alabaster, Ltd., Welling	765	0	0
E. Proctor & Sons, Plumstead	762	1	0
Jas. Wm. Montague, Belvedere	731	13	11
H. Friday & Sons, Erith	731	0	0
Franklin & Co. (Erith), Ltd., Bexleyheath	719	0	0
Myall Bros., Shenfield	650	2	0
P. Miller & Son, Dartford	618	3	4
W. G. Sealey, New Eltham	584	11	10
G. R. Smith, Belvedere	578	9	9
*L. F. Phillips, Erith	573	18	9
W. V. Holmes, Belvedere	539	8	4½

Evesham.—(*a*) 12 houses, Bretforton; (*b*) 14 houses, Broadway; (*c*) 4 houses, South Littleton; (*d*) 10 houses, Hinton-on-the-Green; (*e*) 2 houses, Harvington; (*f*) 4 houses, Church Honeybourne, for R.D.C. R. J. Atkinson, architect, 64, Port-st.:—(*a*) *E. Hartwell, Weston Subedge, £4,166; (*b*) *C. Stewart & Sons, Broadway, £4,843; (*c*) *D. H. Russell, Halford Bridge, £1,560; (*d*) *C. Stewart & Sons, Broadway, £4,070; (*e*) *C. Lock & Sons, Bidford-on-Avon, £765; (*f*) *E. Hartwell, Weston Subedge, £1,260.

Exmouth.—Redecorating the Pavilion, for U.D.C. H. S. L. Knight, A.M.Inst.C.E., M.Inst.M. & Cy.E., E. and S.:—*J. T. Leeming & Son, 24, Alverton-av., Poole, £310 18s.

Greenford.—New club premises erected in Oldfield-ln., for British Legion. A. H. Taylor, architect, 3, Maiden-ln., Crayford:—

Saunders & Gardner, Hanwell	£5,750	0	
B.C.M. Estates & Contractors, Ltd., Southall	4,401	5	
H. & L. Miller, Ltd., Chislehurst	4,275	0	
W. Ward Perry & Son, Hounslow	4,252	0	
*S. G. Smith & Sons, Ltd., 74, Bishop Ken-rd., Harrow Weald	4,009	6	

Guildford.—Erection of Onslow senior school, for E.C.:—

C. T. Corps, Ltd., Guildford	£31,200
J. W. Jones, Ltd., Weybridge	28,996
R. O. Garrard, West Byfleet	28,977
E. Johnson, Liphook	28,700
Hansard, Ltd., London, W.1	28,495
Sewell & Richardson, Wimbledon	27,931
W. A. Harding, Ltd., Guildford	27,786
Cropley Bros., Ltd., Epsom	27,722
A. Grove, Guildford	27,359
Grace & Marsh, Ltd., Croydon	27,162
H. Taylor, Ltd., Epsom	27,160
W. J. Wilkinson & Sons, Farnham	27,068
H. W. Frampton & Co., Guildford	26,891
Drinkwater & Sons, Ltd., Feltham	26,840
David Fry & Son, Godalming	26,772
Uden & Co., Ltd., Epsom	26,739
H. W. Fisk, Ltd., Godalming	26,468
W. A. James & Sons, Maidenhead	26,411
H. Ashenden, Ltd., Guildford	26,340
*R. Holford & Co., Ltd., Walnut Tree-close, Guildford	26,301

Hammersmith.—Garage and service station in Brook Green-rd., W.6. Leslie C. Norton, A.I.A.A., architect, 45, Albemarle-st., W.1. Quantity surveyor, Wallace S. Chapple, F.I.A.S., 10, Great James-st., W.C.:—*E. R. Terry, Ltd., Station-rd., Harrow.

Harrogate.—Extensions to central premises, Albert-st., for Harrogate and District Co-operative Society, Ltd. Plans by the Architects' Department, Co-operative Wholesale Society, Ltd., Balloon-st., Manchester:—*W. Birch & Sons, Ltd., Spen-la., York.

Hexham.—20 houses, with roads and sewers, at Fourstones, for R.D.C. W. Dixon & Sons, architects, 1, Collingwood-st., Newcastle-on-Tyne:—*W. Underwood & Co., Rothbury.

Holborn.—Demolition of buildings on Dombey-st. site, for B.C.:—*H. Sabey & Co., Ltd., £696 17s. 6d.

Hove.—20 flats for aged persons at Bellingham-cres., for T.C.:—*F. W. Beach, of Shoreham-by-Sea, £3,784 5s.

Hull.—Electrical installation at McMillan school, for E.C.:—*Booker & Tarran, 16a, Waltham-st., Hull, £234.

Keighley.—36 houses, Guard House estate No. 2, for Corporation. E. G. Felgate, A.R.I.B.A., Borough Architect, Gas Offices, Cook-ln.:—*E. Turner, Ltd., Bradford-st., Keighley, £17,073 4s.

Lancaster.—Store at brewery, Church-st., for exors. of Wm. Mitchell. Reg. W. Jackson, chartered architect, 43, Church-st. Quantities by architect:—*Black & Nelson, Sun-st., Lancaster.

Liverpool.—Works, for T.C.:—
Builders' work necessary to alteration of environment required to accommodate the statues of his late Majesty King George V and her Majesty Queen Mary, near the Kingsway entrance to Mersey Tunnel—
*W. Thornton & Sons, Ltd., 38, Wellington-rd., Liverpool, 8 ..... £3,648
Roadworks and construction of concrete aprons, etc., at Liverpool Airport—
*J. Jones & Sons (Woolton), Ltd., Higher-rd., Hunts Cross, Liverpool £15,579 8 10
Factory upon piece of land fronting Edwards-la., Speke—
*Direct Labour. (Cost, £30,000.)
Conversion of premises, 170, Islington, into shop and dwelling-house—
*N. Broude, 76, Chatham-st., Liverpool... £366
Provision of bathroom, hot-water service, electric lighting and general repairs at premises, 65, Myrtle-st.—
*N. Broude, 76, Chatham-st., Liverpool £144 4
Additions and alterations to electrical sub-station, Lodge-la.—
*J. L. Rawsthorne & Co., Edwards-la., Speke, Liverpool £3,873
Electrical sub-station in Huyton Hey-rd., Huyton—
*Bragg & Collins, 11-13, Fazakerley-rd., Liverpool £718
Further 98 houses on Woolton-gr. estate—
*W. J. Simms, Sons & Cooke Ltd., Sherwood, Nottingham.
External painting:—*Alfred Tilley, 1a, Kirk-st., Bootle—44 houses, King-st., Garston, £133 2s.; 32 houses, Chesterton-st., Garston, £80; 46 flats, Rankin-st., £179 10s.; 98 flats, Burlington-st., £297 13s.; 429 flats, Adlington-st., etc., £1,387 13s.; 344 flats and 2 shops, Myrtle-gdns., £1,128 16s.; 316 flats, St. Andrew's-gdns., £1,027; 374 flats and 8 shops, Queen Anne-st., £1,258 4s.; 134 flats and 1 shop, Blackstock-gdns., £439 8s.; 63 flats, Fontenoy-gdns., £204. *Geo. Jones & Son, 91, Everton-rd., Liverpool, 6—1,487 houses, Walton-Clubmoor, £4,275 2s.; 60 flats, Prince Edwin-st., £225. *Dent & Graham, 17, St. Mary's-la., Walton, Liverpool, 4—42 houses and flats, Larkhill, £131 14s.; 260 flats and 6 shops, Melrose-rd., £867 10s.; 683 flats, Hornby-st., etc., £2,049 4s. *Chas. A. Critchley, 92, Church-st., St. Helens—801 houses and flats, Finch House, £1,905 19s.; 199 houses, Dovecot, £472 12s. *H. Campbell & Co., 124, Breck-rd., Liverpool, 5—511 flats, Bevington-st., etc., £2,170 19s.; 268 flats, Upper Mann-st., etc., £1,025 2s.

DON'T TENDER UNSUCCESSFULLY

SECURE CONTRACTS WITH

BIG BEN

THE STEEL SCAFFOLDING CO., LTD.

Imperial House, 80, Regent St., London, W.1

Telephone: Regent 1157

132 flats on Hurst-st. site—
*C. J. Doyle, 15, Victoria-st., Liverpool, 2 ..... £66,300
Additional 13 houses on Woolfall Heath estate—
*Unit Construction Co., Ltd., Bentham-dr., Broadgreen, Liverpool, 16.
Exterior painting at Walker Art Gallery, Central Library, Picton Hall and public museum—
*Clayton & Dorsman, Ltd., 56, Myrtle-st., Liverpool £125
Extension of Blackmoor Park Council school—
*Rimmer Bros., Ltd. £10,540
Iron boundary railings at Stanley Park—
*John Lythgoe (Walkden), Ltd., Harriet-st. Wks., Walkden, near Manchester £134 6 3

¶London (Air Ministry).—Contracts placed for week ended March 4:—Hawarden—preparation of landing ground, Bradshaw Bros., Leicester. Upper Heyford—additional buildings and external services, C. Miskin & Sons, Ltd., St. Albans. Cranwell—water filtration, etc., for swimming bath, Candy Filter Co., Ltd., London, W.7. Cardington—compressor house, M. & F. O. Foster & Co., Ltd., Hitchin. Grantham—additional buildings and external services, F. R. Hipperson & Son, Ltd., London, E.C.2. Various stations—provision and planting of trees, Conways, Ltd., Halifax. Plymouth—hutting, J. Gerrard & Sons, Ltd., Swinton, Manchester. Heston—improved lighting on additional landing areas, General Electric Co., Ltd., London, W.C.2. Hawkinge—preparation of landing ground, Bradshaw Bros. (Contractors), Ltd., Leicester. Fowlmere—preparation of landing ground, Delahope, Ltd., York.

London (G.W.R.).—Contracts placed for February:—Provision and installation of automatic and manual telephone exchange at Exeter (St. David's) station—*Automatic Telephone & Electric Co., Ltd., Melbourn House, Aldwych, London, W.C.2. New boiler house and gantry at Old Oak Common—*Tersons, Builders, 128, Goswell-rd., London, E.C.1. Alterations to station buildings at Slough—*McManus & Co., Ltd., London, N.20.

¶London (H.M.O.W.).—Contracts placed for week ended March 2:—Chester Telephone Exchange—erection—N. B. Bell & Co., Ltd., Halton Moor-rd., Halton, Leeds. Chorley, Royal Ordnance Factory—stillages, weatherproof covers, etc.—Fredk. Braby & Co., Ltd., Ida Works, Deptford, London, S.E.8. Chorley, Royal Ordnance Factory — vee blocks, carrier trays, etc.—S. J. Hawkins, Station Works, Flitwick. Chorley, Royal Ordnance Factory—stillages—Robert Hudson, Ltd., Raletrux House, Meadow-ln., Leeds. Hook Telephone Exchange—erection—G. W. Oliver & Sons, Ltd., Flaxpool Mead, Flaxfield, Basingstoke. South Stoke, Lincs—erection of telephone repeater station—T. V. Nix, Oxton, nr. Newark. Telephone Exchange, Standish—erection—R. & J. Bradley, Armoury Bank, Ashton-in-Makerfield. Ministry of Agriculture Veterinary Laboratory, Addlestone — extension of main administrative block—J. Cartwright, Ltd., 100, King's ave., S.W.4. Bright cold drawn steel—Exors. of Jas. Mills, Ltd., Bredbury Steel Works and Rolling Mills, Bredbury, Stockport. Sheet lead and lead pipes—George Farmiloe & Sons, Ltd., 34, St. John-st., West Smithfield, E.C.1. Wood screw guide hooks—Nettlefold & Sons, 163, Euston-rd., N.W.1. Aluminium tops for benches—The Aluminium Plant & Vessel Co., Ltd., Point Pleasant, Wandsworth, S.W.18. Telephone Exchange, Castletown, Isle of Man, erection—The Universal Housing Co., Ltd., 4/5 Peel-rd., Douglas, Isle of Man. Home and Colonial Offices, Whitehall, S.W.1—erection of additional storeys—Speirs, Ltd., 66, Victoria-st., S.W.1. Mattress cases—W. Leet & Son, Ltd., 104, 112, Curtain-rd., E.C.2. Mattress covers—Waring & Gillow (1932), Ltd., 164-182, Oxford-st., W.1. Window aprons — B. Edgington (Silver & Edgington), Ltd., 29, Queen Elisabeth-st., Tower Bridge, S.E.1. Mattress cases—Hampton & Sons, Ltd., 8/9, Pall Mall East, S.W.1. Enamelware—Anglo-Enamelware Co., Ltd., West Bromwich, and Jury Holloware (Stevens), Ltd., Brierley Hill. Electric propeller pans—Revo Electric Co., Ltd., Tividale, Tipton. Postmen's Sub-Office, Wythenshawe, Manchester—erection—Henry Green & Son, Stocks House, Cheetham, Manchester. Stocksfield Telephone Exchange — extension — R. Southren, Dipton, S.O., Newcastle-on-Tyne. Bridgend, Royal Ordnance Factory, Smoke Group—installation of wiring for electric light and power — B. French, Ltd., Exchange-st., Kidderminster. Telephone Exchange, Whalley—erection—J. Turner & Sons (Preston), Ltd., William Henry-st., Preston. Bradford Telephone Exchange—installation heating and hot-water services—F. G. Skeritt, Ltd., 35, Ebury-rd., Nottingham. Washington Station, Durham — Employment Exchange—erection—Alex. Anderson (Contractors), Ltd., 1, Stanmore-rd., Heaton, Newcastle-on-Tyne. Royal Arsenal, Woolwich—25-ton hydraulic presses—Francis Shaw & Co., Ltd., Corbett-st., Manchester, 11. Uniform clothing—Milns, Cartwright & Reynolds, Ltd., Leven-rd., Poplar, E.14. Dormant claims cabinets—Sankey-Sheldon (Harris & Sheldon, Ltd.), 46, Cannon-st., E.C.4. R.A.F. Volunteer Reserve, Redhill Lodge, Nottingham (house only)—alterations—H. Wiltshire & Sons, Ltd., Park-rd., Lenton, Nottingham. H.M. Stationery Office, Princes-st., S.W.1.—adaptations and decorations—Soole & Son, Ltd., Dunstable Works, Sheen-rd., Richmond. Princes Risborough Forest Research Laboratory, Wood Preservation Laboratory—alterations and additions—G. S. Lewis & Bros., Castle-st., Reading. Regent's Park—erection of a fountain and pump house—Holliday & Greenwood, Ltd., 11, Buckingham Palace-gdns., S.W.1.

London (War Office).—Contracts placed during week ended March 2:—Plymouth—provision of sergeants' bunks, H. Meckhonik, London, W.1; Bovington Camp—buildings and improvements, A. J. Dunning & Son, Weyhill; Haddington—building, Stewart, McIntyre & Co., Ltd., Edinburgh; Chatham—erection of Sandhurst block, H. Boot & Sons, Ltd., London, S.W.10; Devonport—officers' mess and quarters, etc., Staverton Builders, Ltd., Totnes; Branston—married officers', warrant officers' and married soldiers' quarters, Thomas Lowe & Sons, Ltd., Burton-on-Trent; Derby—building work for M.T. garages, F. Perks & Sons, Ltd., Long Eaton; Pontefract—sergeants' mess, W. Birch & Sons, Ltd., York; Barry Dock—water mains, A. Monk & Co., Ltd., Warrington; Chatham—workshop and garage, Old Forage Estates, Ltd., Sidcup; Bulford—16 married soldiers' quarters, James & Crockerell, Salisbury; Plymouth—blinds and shutters, Pearn Bros., Ltd., Plymouth; Blackdown—vehicle shed, E. P. Day, Ltd., North Finchley, N.12.

London.—Works for L.C.C.:—

Rebuilding, L.C.C. Smithfield Meat Trades Institute, Holborn—

A. Roberts & Co., Ltd.	£47,422
C. Miskin & Sons, Ltd., St. Albans	45,800
Prestige & Co., Ltd.	45,437
Allen Fairhead & Sons, Ltd., Enfield	45,416
G. E. Wallis & Sons, Ltd.	45,383
Fred & T. Thorne	45,177
J. & C. Bowyer, Ltd.	44,976
W. H. Gaze & Sons, Ltd., Kingston	44,583
Halse & Sons, Ltd.	44,459
Thomas & Edge, Ltd.	44,297
L. H. & R. Roberts	43,884
Truett & Steel, Ltd., Thornton Heath	43,221
*C. P. Roberts & Co., Ltd., 31-33, High Holborn, W.C.1.	42,703
Architect's estimate	44,478

103 dwellings at Chicksand estate, Stepney—

R. J. Rowley, Ltd.	£18,350
E. D. Winn & Co., Ltd.	17,953
H. C. Horswill, Ltd.	17,930
C. Miskin & Sons, Ltd., St. Albans	17,523
Harry Neal, Ltd.	17,439
Tarran Industries, Ltd.	17,321
Speirs, Ltd.	17,295
John Knox (Bristol), Ltd., Bristol	17,232
W. H. Gaze & Sons, Ltd., Kingston	17,183
Patman & Fotheringham, Ltd.	17,114
A. E. Symes, Ltd.	16,847
Charles S. Foster & Sons, Loughton	16,782
W. J. Simms, Sons & Cooke, Ltd., Nottingham	16,537
Rowley Bros., Ltd.	16,144
*A. T. Rowley (London), Ltd., Cambridge Works, Lordship-ln., Tottenham, N.17	16,122
Architect's estimate	16,234

833 houses and flats and other buildings and the construction of roads and sewers, Kidbrooke site, Greenwich—

John Laing & Son, Ltd.	£462,000
Leslie & Co., Ltd.	456,435
Trollope & Colls, Ltd.	453,282
Rice & Son, Ltd.	449,415
Holloway Bros. (London), Ltd.	448,489
Gee, Walker & Slater, Ltd.	440,986
John Mowlem & Co., Ltd.	429,450
Holland and Hannen & Cubitts, Ltd.	428,142
Wilson Lovatt & Sons, Ltd.	418,056
Higgs & Hill, Ltd.	417,585
Henry Boot & Sons, Ltd.	415,233
*Unit Construction Co., Ltd., 1, Robert-st., W.C.2	404,168

(Rest of London.)

London.—Works, for City Corporation:—

Depot for loading of market refuse into vans on site of certain properties in vicinity of Spitalfields Market for purpose of improving the cleansing arrangements at Market—

E. H. Smith (Croydon), Ltd.	£985
W. Gladding & Co., Ltd.	940
Courtney & Fairbairn, Ltd.	898
‡Killby & Gayford, Ltd.	863

For repainting and repairs at 35, 36 and 37, Upper Thames-st., and warehouse "E" Caldwell-yard, E.C.—

A. G. Scott, Ltd.	£395 0 0
Falkus Bros., Ltd.	255 0 0
‡F. J. Howard	238 12 6

Luton.—Reinforced concrete water tower, Kensworth, for R.D.C. H. Pickering, surveyor, 73, Westgate, Dunstable:—*Commercial Structures, Ltd., Staffa Works, Leyton, E.10. £954 6s. 1d.

Manchester.—We stated in our last issue that a contract had been placed for a new hotel in Piccadilly for the City Properties (Manchester), Ltd. This, we are informed, is incorrect, and no contract has yet been placed, as the scheme is in its early stage.

Marylebone.—Making permanent trenches in Regents Park, for B.C.:—

Wilson, Lovatt & Sons, Ltd.	£1,770 0	(a)£1,198 0
Helical Bar Engineering Co., Ltd.	1,359 14	—
Dugouts, Ltd.	1,278 7	(a)1,361 17
Trevor Construction Co., Ltd.	1,481 0	(a)1,050 0
Lees, of Enfield, Ltd.	1,999 0	—
Diespeker & Co., Ltd.	1,522 6	*(a)1,079 10
J. Mowlem & Co., Ltd.	1,681 0	(a)1,329 0
Ditto		1,500 0
Trianco, Ltd.	—	(a)1,096 6
J. Cochrane & Sons, Ltd.	1,310 17	(a)1,149 12
Power Lines Construction Co., Ltd.	1,570 0	(a)1,520 0
Wates, Ltd.	1,600 0	(a)1,250 0
J. L. Keir & Co.	1,550 0	(a)1,100 0

(a means alternative.)

Newcastle-on-Tyne.—Hotel, Westgate-rd., for Newcastle Breweries, Ltd. Mauchlen & Weightman, architects, 12, Saville-row:—*S. Miller, Ltd., 17, North-st., Newcastle-on-Tyne.

Newcastle-on-Tyne.—Warehouse in City-rd., for Jebb Bros. Cackett, Burns Dick & McKellar, architects, Ellison-pl.:—*W. Hall, Ltd., Derwentwater-rd., Gateshead.

Newcastle-on-Tyne.—Rebuilding of the "Bay Horse" inn, Westgate-rd., for R. Deuchar, Ltd., 146, Sandyford-rd., Newcastle. S. H. Lawson, architect, Emerson-chambs., Blackett-st.:—*J. Jackson & Sons, Corporation-st., Newcastle-on-Tyne.

Newcastle-on-Tyne.—Works, for City Council:—Alterations to weights and measures dept., City-rd.—*J. Horn, Newcastle, £156. Repairs to lantern and clock tower at St. Nicholas' Cathedral—*H. Lowry, Newcastle, £434. Conversion of stores into offices at City Hospital—*J. T. Main, Newcastle, £268. Alterations to North Lodge, Scrogg-rd.—*R. W. Fullerton, 33, Beatrice-rd., Newcastle-on-Tyne, £953.

Newcastle-under-Lyme.—Works, for T.C.:—Electrical installation in shops and offices, High-st. (Hickton & Madeley, architects, St. Paul's-close, Walsall)—

Reynolds & Bradwell, Birmingham	£640
F. Hancock, Fenton	562
F. W. Langley, Ltd., Hanley	558
W. Truswell & Son, Newcastle	549
*J. Bagguley & Son, Newcastle	478

Provision of shop fronts for 13 shops in Merrial-st. (S. A. Wilmot, architect, Bournville Estate Office, Birmingham)—

	Alternative tender.
Parnall & Sons, Ltd., Bristol	£2,617 £2,503
Wm. Mason & Son, Ltd., Leeds, 12	2,616 2,656
Samuel Elliott & Sons (Reading), Ltd., Reading	2,298 2,323
A. J. Gupwell (S.F.), Ltd., Birmingham, 5	2,250 2,370
John Curtis & Son, Ltd., Leeds, 9	2,215 2,250
A. Edmonds & Co., Ltd., Birmingham	2,000 2,014
Harris & Sheldon, Ltd., Birmingham	1,888 1,888
Arnold & Sons, Ltd., Northampton	1,785 1,785
*Cheltenham Shopfitting Co., Ltd., Station Wks., Cheltenham	1,572 1,530

(a) Insertion of dampcoarse in Council houses at Whitfield-av. and Westland-av.; (b) alterations and additions, etc., to Hassall-st. Council school—

(a) *Joseph Jones (N.S.), Ltd., Liverpool-rd., Newcastle £854

(b) Wrought-steel windows—

*Doodson & Bain, Ltd., Wilson-st., Manchester, 11 635

Oxford.—Gymnasium, etc., at Temple Cowley senior mixed schools, for E.C.:—Substructure—*Hansard, Ltd., London, £1,938. Superstructure—*J. Harrison, Oxford, £1,350.

Oxford.—44 houses and 40 flats at The Slade, and 36 houses at Cumberland-rd., for T.C.:—*M. J. Burton, Ltd., 105, Duke-st., Liverpool, propose

Penybont.—Additional offices at Coity-rd., Bridgend, for R.D.C. J. Simon Davies, S.:—*W. H. Whitlock, Aberkenfig, £1,850.

Peterborough.—New reservoir, for T.C.:—*J. L. Eve Construction Co., Ltd., £20,321.

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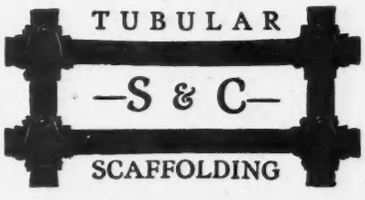

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Ramsey (Isle of Man).—Senior school for 160 boys and 160 girls, for E.C. A. J. Davidson, A.R.I.B.A., architect, Athol-st., Douglas, Isle of Man. Quantities by Thomas Priestley & Sons, 8, Blenheimter., Woodhouse-ln., Leeds:—*M. McArd & Son, Promenade, Port Erin, Isle of Man.

Rochdale.—Installation of heating apparatus in "K" block at Birch Hill Institution, for C.B. S. H. Morgan, M.Inst.C.E., B.S.:—*Henry Tattersall, Ltd., Spotland Bridge, Rochdale.

Rochdale.—Internal painting at town hall, for C.B. B.S.:—*W. Lord, 6, Belgrave-st., Rochdale.

Rotherham.—(a) Interior decoration of 24 firemen's houses at new fire station; (b) shop premises, corner of Gerrard-rd. and Wellfate, for T.C. V. Turner, B.E.:—(a) *Beeden, Ltd., Thrybergh, Rotherham, £189; (b) *Direct Works Dept., Rotherham Corporation.

Ruthin.—Extensions to County Buildings, Clwyd-st., for Denbighshire County Council. W. D. Wiles, County Architect, Wrexham:—*T. Lowe & Sons, Ltd., Curzon-st., Burton-on-Trent, £63,771. Heating installation—*G. N. Haden & Son, Ltd. 848, India-bldgs., Liverpool, 2, £12,395.

Samlesbury.—Preparation of site for use as landing ground for aeroplanes, for Preston and Blackburn Corporations. R. Williams, B.E., Municipal-bldgs., Preston:—*B. Sunley & Co., Ltd., Great West-rd., Brentford, Middlesex, £28,837.

Scarborough.—Pumping station at Cayton Bay, for T.C. H. V. Overfield, Assoc.M.Inst.C.E., Borough and Water Engineer:—*E. Hunter, Belle Vue Works, Scarborough.

Sheffield.—Works, for T.C.:—Sub-stations at Dobcroft-rd. and Wilcox-rd.—*Public Works Dept., Corporation, £2,300. Erection of Hatfield House-ln. Council school—*W. G. Robson, Ltd., Bamforth-st., Sheffield, £38,920. Fencing at Arbourthorne playing fields—*A. Shaw & Sons, Ltd., 26, Duke-st., Sheffield, £652 17s. 6d. Heating apparatus, etc., Parson Cross No. 2 junior Council school—*Maddock & Wright, Lillie House, London-rd., Leicester, £1,660. Heating apparatus, etc., Ash House, Dore—*Wright Bros. (Sheffield), Ltd., Trent-st., Attercliffe, Sheffield, 9, £995. Heating and ventilation work at Animal House, City Laboratory—*Newton Chambers & Co., Ltd., Thorncliffe Wks., Ecclesfield, Sheffield, £2,018; panel heating—*Rosser & Russell, Ltd., Bank Low Mills, Marsh-ln., Leeds, 9, £1,254. Bathrooms and alterations and additions to sluices at each end of observation block, Low Moor Hospital—*Public Works Dept., £435.

Sheffield.—Repairs and renewals to roof of Townhead Street Garage, for T.C.:—*Turnerised Roofing Co. (Great Britain), Ltd., £658.

Skegness.—Extensions to Sun Castle, North-pde., for U.D.C. R. H. Jenkins, E. and S.:—*W. Freetham & Son, 114, Drummond-rd., Skegness, £1,698 10s.

Slyne-with-Hest.—Detached house, Hest Bank-la., for Miss D. Bell. Reg. W. Jackson, chartered architect, 43, Church-st., Lancaster. Quantities by architect:—*Nicholson & Wright, Ltd., Cable-st., Lancaster.

South Molton.—20 houses at Chulmleigh, for R.D.C.:—*Dennis & Son, Braunton, £7,543.

South Shields.—(a) 154 houses, Marsden-rd., and (b) 34 houses, Wenlock-rd., for T.C. J. Reid, B.E.:—(a) G. Dailey, Ltd., South Shields, £53,840. (b) W. D. Allison, Whitburn, £15,163.

Southsea.—Extra story to "Belvedere" hotel, East Southsea. A. J. Dennison, architect, High-st., Old Portsmouth:—*Sadler & Co. (Contractors), Ltd., St. Simon's-rd.

Stafford.—Alterations to Groundslow sanatorium, for Staffordshire, Wolverhampton and Dudley Joint Board for Tuberculosis:—Building of the nurses' home, and new pavilion—*J. Hickman & Sons, £26,310; engineering services—*G. S. Hall, £14,979; electrical installation—*J. W. E. Simpson, £3,242 11s. 9d.

Stoke Newington.—Works for B.C.:—

Community centre, Lordship-ter. housing estate—*W. F. Marshall, Ltd., 71, Stradbroke-gr., Buckhurst Hill, £770 10s.

Relaying the floor of library hall—*National Flooring Co., Ltd., £142 10s. 6d.

Stockton-on-Tees.—Maternity home, for T.C. A. S. Knolles, B.E.:—*Lane, Fox & Co., Norton-rd., Stockton-on-Tees, £24,814.

Stoke-on-Trent. — Improvements to Cooke-st. Council school, for T.C.:—*S. Kettle & Son, Longton, £1,519.

Stretford.—Aircraft factory, for Metropolitan Vickers Electrical Co., Ltd., Trafford Park, Manchester, 17. Plans prepared by own staff architect:—*Russell Building and Contracting Co., Ltd., 105, Plymouth-gr., Manchester, 15. Steelwork—*J. Parks & Sons, Manchester-rd., Northwich.

Surrey.—(1) Extension of nurses' hostel, and (2) maternity ward block at County Hospital, Dorking-rd., Epsom, for C.C. Newberry & Fowler, architects, Parliament-mansions, Orchard-st., S.W.1:—*Grace & Marsh, Ltd., New Bridge Wks., Wadden, (1) £51,076, (2) £28,318.

Sutton Coldfield.—Senior school at Holland House estate, for E.C. Rolf Hellberg, A.R.I.B.A., architect, 13, Queen Victoria-rd., Coventry:—*Joseph Daniels, Courthouse Green Bell, Green-rd., Coventry, £50,000.

Trowbridge.—Dining hall and kitchen at the High School for Boys, for Wilts C.C.:—*H. Isley, Trowbridge, £2,240.

Wakefield.—34 houses, for R.D.C. W. E. Massie, engineer and surveyor :—2 at Crofton : Bricklayer—*Bould & Woodcock, Batley. Joiner—*G. T. Turvey, Wakefield. Plumber—*G. L. Gibson & Co., Ltd., Wakefield. Plasterer—*R. H. Lockwood, Horbury, near Wakefield. Tiler—*J. W. Illingworth, Ltd., Wakefield. Painter—*Direct Labour. 4 at Crofton : Bricklayer—*Bould & Woodcock. Joiner—*G. T. Turvey. Plumber—*N. Hancock, Wakefield. Plasterer—*R. H. Lockwood. Tiler—*J. W. Illingworth, Ltd. Painter—*Direct Labour. 18 at Middlestown : Bricklayer—*C. H. Clark & Son, Ltd., Middlestown, near Wakefield. Joiner—*G. T. Turvey. Plumber—*N. Hancock. Plasterer *R. H. Lockwood. Tiler—*J. W. Illingworth. Painter—*Direct Labour. 2 at Middlestown : Bricklayer—*C. H. Clark & Sons, Ltd. Joiner—*G. T. Turvey. Plumber—*G. L. Gibson & Co., Ltd. Plasterer—*R. H. Lockwood. Tiler—*J. W. Illingworth, Ltd. Painter—*Direct Labour. 6 at Walton : Bricklayer—*C. H. Clark & Son, Ltd. Joiner—*G. T. Turvey. Plumber—*N. Hancock. Plasterer—*R. H. Lockwood. Tiler—*J. W. Illingworth, Ltd. Painter—*Direct Labour. 2 at Sharlston : Bricklayer—*W. J. Abbot, Sharlston, near Wakefield. Joiner—*G. T. Turvey. Plumber—*N. Hancock. Plasterer—*R. H. Lockwood. Tiler—*J. W. Illingworth, Ltd. Painter—*Direct Labour.

Wakefield.—Dining hall to works, Dewsbury-rd., for Bradley & Craven, Ltd., manufacturers, Westgate Common. Plans prepared by own staff :—Builder—*G. Hall Bros., Wakefield. Joiner—*G. T. Turvey, Wakefield. Tiler—*A. Brown, Wakefield. Plumber—*W. Clarke, Horbury. Plasterer—*W. Newton, Lofthouse Gate. Painter—*T. E. Taylor & Sons, Wakefield. Heating—*Wakefield Gaslight Co., Wakefield.

Warrington.—Shoe repairing factory at Wilderspool Causeway, for R. Roberts & Son, Ryland-st. W. J. Johnson, architect, 6, Egypt-st. :—*W. & A. Ashton, Bridgefoot, Warrington.

Warrington. — External painting 412 Council houses on Westy-ln. housing site, for T.C. J. Y. Hughes, B.S. :—*R. Syers, Penketh, Warrington.

Westby.—Pump house at Westby reservoir, nr. Kirkham, for Fylde Water Board. E., Sefton-st., Blackpool :—*Atherton Bros. (Blackpool), Ltd., Peter-st. Sawmills, Blackpool.

Wigan.—Garages and storerooms at electricity works, for T.C. J. Dove, B.E. :—*Direct Labour Dept., Corporation, £6,000.

Wolverhampton.—Paint shop and garage, for Boulton Paul Aircraft, Ltd., Codsall. W. A. Hattrell & Partners, architects, 1, Queen's-rd., Coventry :—Builders—*Henry Willcock & Co., Ltd., Wolverhampton. Steelwork—*Boulton & Paul, Ltd., Norwich.

Yarmouth.—Changing rooms on Cobholm playing field, for E.C. :—

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